

Oracle® Retail Value Chain Collaboration

Operations Guide

Release 12.0.9

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Primary Author: Divya Begur

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Preface

This Operations Guide serves as a Value Chain Collaboration (VCC) reference to explain the processes. The guide is designed so that you can view and understand key system administered functions, including batch processing, the flow of data into and out of the application, and the application's behind-the-scenes processing of data.

The Oracle Retail Value Chain Collaboration (VCC) Operations Guide provides a detailed insight on the VCC Backend System Configuration and Administration with Database guidelines and Batch Processing. It contains the procedures listed below:

- To configure the VCC Integrator
- To configure Loader Control Files
- Insight on the VCC Log Files
- VCC Schema Considerations
- VCC Database Maintenance
- VCC Technical Architecture
- VCC Integrator Loads and Extracts
- Batch Processing
- Integrator Data Loader and Extractor
- Troubleshooting the VCC Integrator Data Loading

Audience

Anyone with an interest in developing a deeper understanding of the underlying processes and architecture supporting Oracle Retail Value Chain Collaboration (VCC) functionality will find valuable information in this guide. There are three audiences in general for whom this guide is written:

- Business analysts looking for information about processes and interfaces to validate the support for business scenarios within VCC and other systems across the enterprise.
- System analysts and system operations personnel.
 - Who are looking for information about VCC's processes internally or in relation to the systems across the enterprise.
 - Who operates on VCC regularly.
- Integrators and implementation staff with overall responsibility for implementing VCC.

Related Documents

For more information, see the following documents in the Oracle Retail Value Chain Collaboration Release 12.0.9 documentation set:

- *Oracle Retail Value Chain Collaboration Release Notes*
- *Oracle Retail Value Chain Collaboration Installation Guide*
- *Oracle Retail Value Chain Collaboration User Guide*
- *Oracle Retail Value Chain Collaboration Online Help*

Customer Support

- <https://metalink.oracle.com>

When contacting Customer Support, please provide:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to recreate
- Exact error message received
- Screen shots of each step you take

Review Patch Documentation

If you are installing the application for the first time, you install either a base release (for example, 12.0) or a later patch release (for example, 12.0.10). If you are installing a software version other than the base release, be sure to read the documentation for each patch release (since the base release) before you begin installation. Patch documentation can contain critical information related to the base release and code changes that have been made since the base release.

Oracle Retail Documentation on the Oracle Technology Network

In addition to being packaged with each product release (on the base or patch level), all Oracle Retail documentation is available on the following Web site (with the exception of the Data Model which is only available with the release packaged code):

http://www.oracle.com/technology/documentation/oracle_retail.html

Documentation should be available on this Web site within a month after a product release. Note that documentation is always available with the packaged code on the release date.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.

Convention	Meaning
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Introduction to Value Chain Collaboration

What is Value Chain Collaboration?

Oracle Retail Value Chain Collaboration combines supply chain data visibility with the flexible exception identification and collaboration features needed for collaborative forecasting and replenishment. It is a highly flexible, web-based planning engine that allows manufacturers and retailers to collaborate on turning demand forecasts into order and shipment plans.

Benefits of VCC

Oracle Retail Value Chain Collaboration supports collaborative inventory management by giving visibility and planning responsibility to the buyer, the seller, or both. By collaborating, retailers and manufacturers can maximize their trading relationships for increased efficiency and mutual success.

- VCC automatically maps sales history, forecasts, inventory, orders and other supply and demand information into each organization's product and location hierarchies. Each company can work using its own product identifiers, calendars, and units of measure.
- The application's project orders beyond the next delivery cycle lead to dramatically lower inventory requirements to meet the given customer service level, as compared to reorder-point-driven replenishment systems.
- The system creates exception rules through a point-and-click interface to highlight business issues such as out-of-stock conditions, excessive forecast error, or deviations in retailer/supplier plans.
- Guides users through an analysis and resolution of each exception or resolving it automatically if desired.
- Flexible disaggregation (allocation) features support changes to plans at any level, which are reflected in trading partners' views and exported to enterprise systems.
- The system measures the progress through built-in metrics calculations and reporting features.

An optional integrated online analytical processing (OLAP) module allows users to perform multi-dimensional analysis of demand and supply data, providing robust business intelligence for retailers and manufacturers to support demand planning, point-of-sale analysis, promotion analysis, scorecarding, benchmarking, return on investment (ROI) analysis, and other analytical tasks.

Backend System Configuration and Administration

This chapter describes how to configure the Value Chain Collaboration (VCC) Integrator and the VCC Log Files.

Integrator and Configuration

This section comprises a detailed description on the following topics:

- [Configuring the VCC Integrator](#)
- [Configuring the Loader Control Files and Extractor Control Files](#)

Configuring the VCC Integrator

Before configuring and running the Integrator, ensure that your database schema has been built.

When you configure the VCC Integrator, it supplies the Integrator with basic information about your VCC Server, which is filled in by default if you have configured your server.

- General settings that allow you to create collaboration items. This is “off” by default and is provided only for the Leaf Stream Loader.
- Basic information about your database including your database user name and password. This information is filled in automatically if you have configured your database
- Integrator specific settings include the following:
 - The user name and password the Integrator uses to log in to the VCC Server.
 - The integrator log file.
 - The Integrator archive file, which is used to store the summary.xml log file
 - Checking the data stream creation date before loading (if you intend to load multi generational data streams in a single file, the data streams must have different creation dates).

The information is stored in the adaptor.properties file located in:

[SYNCRA_HOME]\integrator\adaptor.properties

If the VCC Integrator fails to run because there are database settings missing, you will get a message similar to the following in the Integrator log file:

Figure 2–1 Integrator Log File Message

```

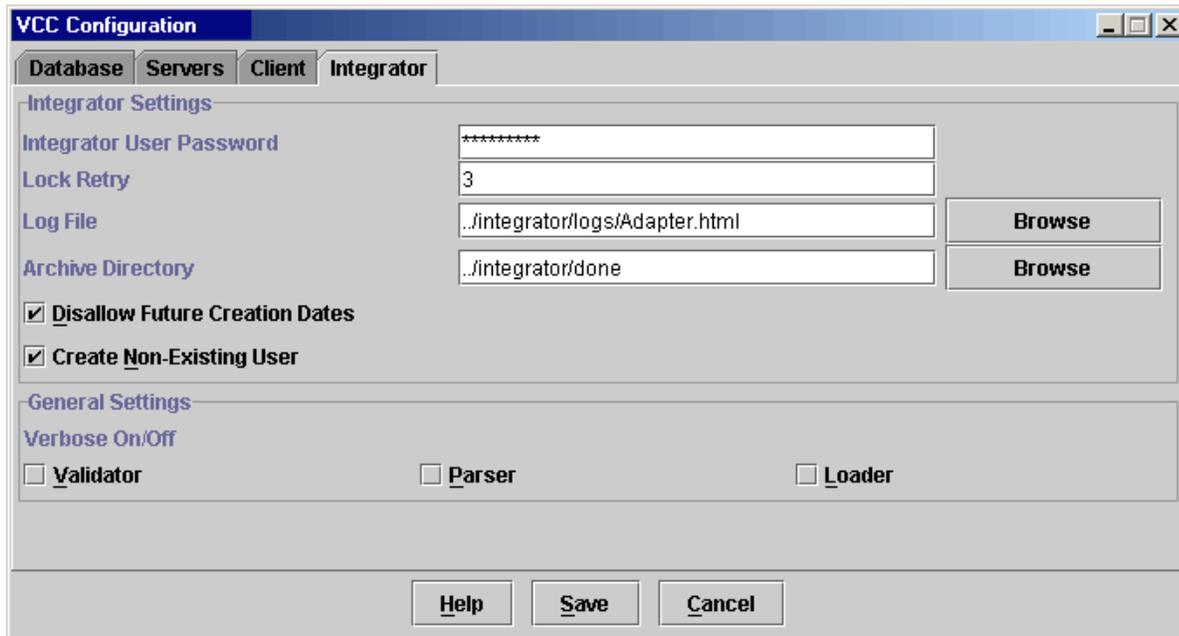
-----
---java.library.path=.lib
(Logger)(setLogFileName)Setting log file to outputAdapter.html
(Logger)(setLogFileName)Log file is HTML file.
8/31/01 12:56 PM:(Adapter)(parseArgs) logfile, outputAdapter.html, -p>
8/31/01 12:56 PM:Syncra Integration Adapter Copyright (c) 1999-2001 Syncra Systems, Inc. All Rights Reserved.
~p>
8/31/01 12:56 PM:(Adapter)(Constructor) User(mbelluscj).JdbcDriver(oracle.jdbc.driver.OracleDriver).JdbcUrl(jdbc:oracle:thin:@ccc:1521:syncra)Server(ccc)-p>
8/31/01 12:56 PM:errorCode=0-10-184-328 message: Error initializing Database StatementManager details: Exception initializing StatementManager (o exception: The Netw

```

To specify an Integrator’s user and configuration settings, follow the steps described below:

1. Select **VCC - VCC Configurations - VCC Configurations** from the VCC program group. The VCC Configurations screen appears.

Figure 2–2 VCC Configuration



2. Click the **Integrator** tab.
 - In the Integrator User Password field the default password is “pinkrhino”.
 - In the Lock Retry field, enter the number of execution attempts before quitting if the task is blocked by an active conflicting lock. Wait for five seconds before trying again. While the attempts to execute continue, the job status shows “Waiting on lock.” If lock remains in place after attempts to execute reaches the number entered in the Lock Retry field, the job status shows “Could not obtain lock.” Entering a negative number results in an unlimited number of re-trying.
 - In the Integrator Log File field, enter the pathname for the log file.
 - In the Integrator Archive Directory field, enter the path of the directory where archived summary.xml log files are stored.

- Select the **Disallow Future Creation Dates** checkbox if you do not want to load data streams that contain future creation dates.
- The **Create Non-Existing User** checkbox allows you to specify whether or not previously non-existing users should be created during data loading. If the data file you are loading contains usernames that do not currently exist, these names (eventually data file) would otherwise be rejected if “Create Non-Existing User” is not checked. If you select this box, any names that were not previously loaded or created are added to the database.

In the “General Settings” portion of the Integrator pane, check Verbose On/Off for the Validator, Parser and Loader depending on your requirements. Selecting the checkbox turns verbose mode on.

Click **Save**. The values are saved in the Adapter.properties file.

Configuring the Loader Control Files and Extractor Control Files

This section discusses the following:

- [About Integrator Control Files](#)
- [Integrator Loader Control File Templates](#)
- [Integrator Extractor](#)
- [About Integrator Control File Definitions](#)
- [Configuring Common Definitions](#)

About Integrator Control Files

The VCC Integrator allows you to load data into VCC from ASCII files and extract data from the VCC database. Before you can load data or extract data you must define a control file for load procedure or data extract procedure that describes to the Integrator the format of the file such as the delimiter used to separate the items in the file and the columns (or non columns) in which the data items appear.

You must select a template file and build a control file or files for Loaders. With the exception of the Stream Extractor, all other Extractors automatically select the appropriate format file. You do not have to create one from a template file. For stream extraction, you will need to create the control file from a template file.

There are many different types of data you can load into VCC or extract from the database. Each type has different fields. You must create a control file from a control file template for each type of load or extract describing the fields you are using and the order in which the fields appear in your data stream (for loading) or the order in which you want the fields to appear in the file for a data extract. The control file templates for data loading are listed in “Integrator Loader Control File Templates”. The control file templates for data extraction are listed in “Integrator Extractor”.

Integrator Loader Control File Templates

The types of data you can load and their template file names include the following:

- Supply Blocked Dates — SupplyBlockedDates.template
- Collaboration Items — collabItems.template
- Scheduler Tasks — SchedTasks.template
- Leaf Streams — LeafStreams.template
- Demand Policy — DemandPolicy.template

- Aggregate Stream — AggregateStream.template
- Events Data — Event.template
- Exception Criteria — ExceptionCriteria.template
- Exceptions — Exception.template
- Master Data Loader — Masterdata.template
- Price Profiles — PriceProfile.template
- Supply Policy — SupplyPolicy.properites
- Metrics — Metrics.template
- Aggregate Definitions — AggregateDefinition.template
- Event Stream Set — EventStreamSet.template
- UOM conversion factors — UOM.template
- Disaggregation Profile — DisaggProfiles.template

Integrator Extractor

Using the VCC Integrator, you can extract the following types of data. With the exception of the Data Stream Extractor, you do not have to select a template file and build a control file for the Extractor. A format file is automatically loaded when you select an Extractor type.

The template file for Data Stream Extractor is extractDataStream.template.

- Supply Blocked Dates
- Collaboration Items
- User Extract
- Data Stream Extract
- Demand Policy
- Exception Criteria
- Exceptions
- Master Data
- Price Profiles
- Promotions
- Supply Policy
- Send Stream Data
- Collaboration Product Hierarchy
- UOM Conversion Factors
- Metric Definitions
- Disaggregation Profiles
- Disaggregation Factors

About Integrator Control File Definitions

Before you can load any data into VCC, you must use the Integrator to define the format of the data stream. The file that describes your file format is called a control file.

VCC supplies default template control files for all the types of data you can load or extract. The Integrator allows you to modify these format file templates for your specific requirements.

If there is an error when you create a control file, for example, if the control file cannot be updated for any reason, the error is reported in `Syncra_loader_extractor_configuration_launch.log`.

Note: If a control file contains Kanji characters and you want to FTP the file to another system, you must FTP the file as ASCII only.

For each control file you create, there are several screens that you must configure for each control file. They are the following:

- Common definitions — allows you to configure a file group, specify the location of completed files, and specify the specific character set you are using. For details, see [“Configuring Common Definitions”](#).
- Delimited definitions

The delimited definitions include the following:

- Delimiter definition — allows you to specify the delimiter (such as a comma, a tab or some other delimiter) you use in your data stream files that separates the data stream elements in the file.
- Column definitions — allows you to specify the column in which specific data elements appear in your data file or whether you want to define a specific data element as a global value. For the specific columns required for a particular data load, see the appropriate data load section of Integrator Data Loader and Data Extractor Field Definitions.
- Global column definitions — allows you to define a global value for any element in your data stream. For example, your company ID may not occur in your actual data file, but you can include it in the control file by specifying it as a global value. The global value is loaded as if it were included in the data file. Defining a value as global simply allows you to avoid repeating it in the data file.
- Do not define all parameters as Global. At least one parameter must be column-based.

Note: Do not open multiple loader or extractor files simultaneously. Open only one file at a time, configure or edit the file, save it and exit from the Utility. Run the utility and open another file to configure another loader or extractor file.

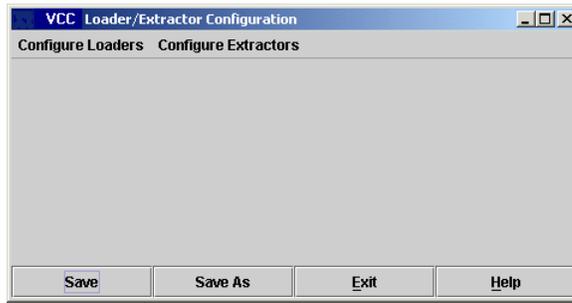
Configuring Common Definitions

To configure the Common definitions for a loader or extractor, you must specify a file group (if applicable), the location of completed files to move, and the specific character set you are using. The Common definitions vary slightly among the various loaders and extractors, so some have additional fields to define depending on the type of load or extract.

To configure the Common definitions, follow the steps given below:

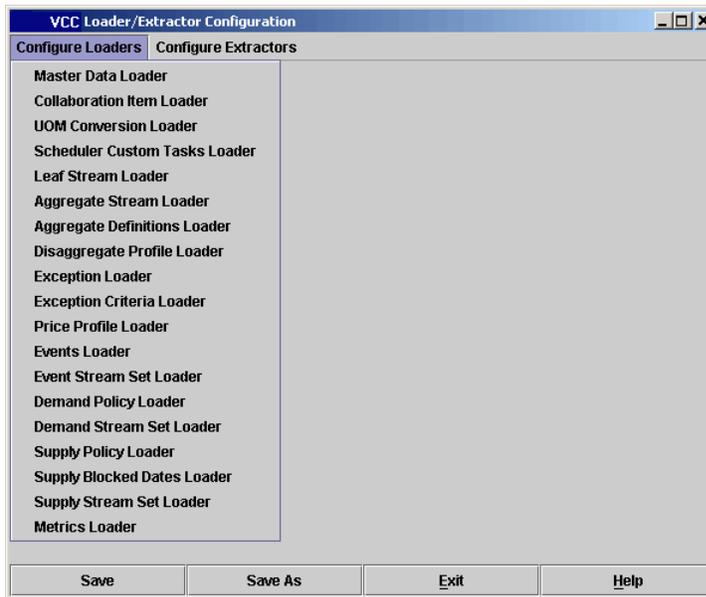
1. Select **VCC - VCC Configurations - VCC Loader Extractor Configurations** from the VCC program group. The Control File Configurations screen appears.

Figure 2–3 Control File Configuration



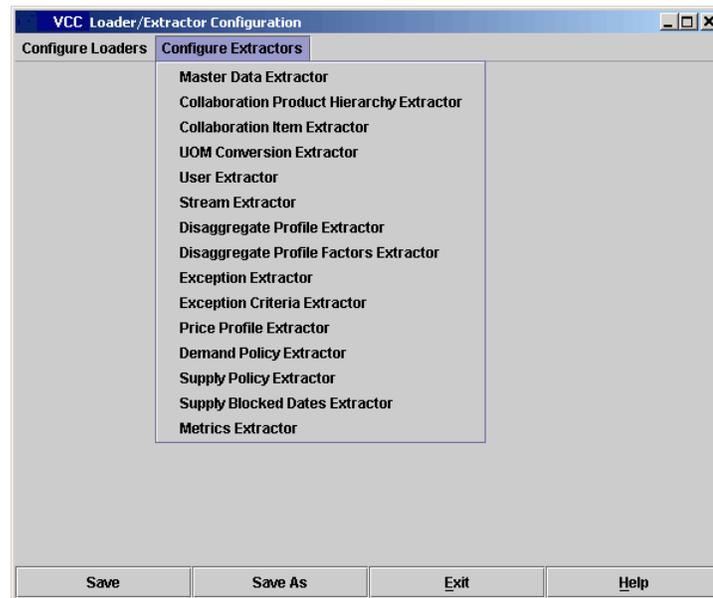
2. For loaders, click **Configure Loaders**. The drop-down menu of available loaders appears.

Figure 2–4 Configure Loaders



For extractors, click the **Configure Extractors** tab. The drop-down menu of available extractors appears.

Figure 2–5 Available Extractors



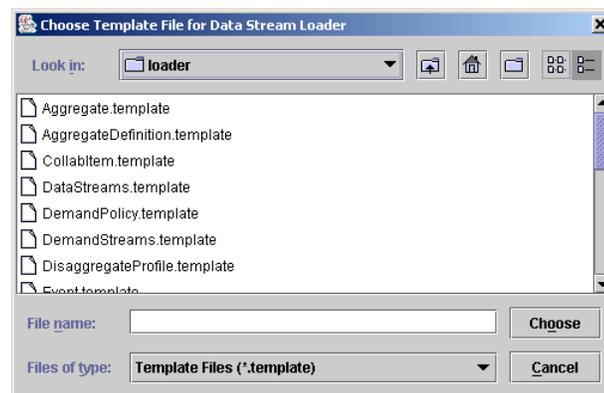
3. For the VCC Leaf Stream Loader, select the appropriate control file or template file from the drop-down list. See “[Integrator Loader Control File Templates](#)” for a list of corresponding control and template files.

For the Stream Extractor only, select the appropriate control file or template file from the drop-down list. The other Extractors do not require a template file.

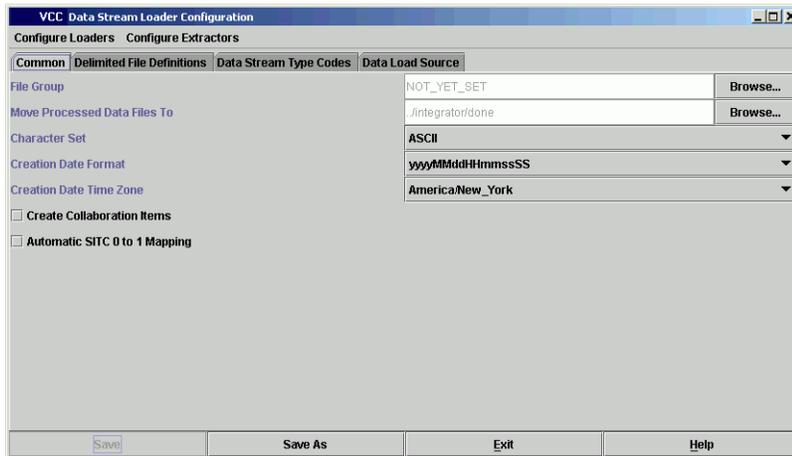
4. In the Choose Template Files pane, select your loader template file. If this is the first time you are creating a control file, select the template file in the VCC Integrator \template \loader directory and create your control file from it.

You do not have to select a template file for Extractors.

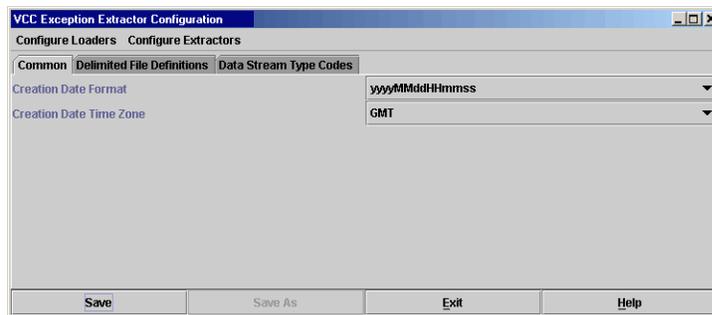
Figure 2–6 Template File Location



5. Once you have selected the appropriate template file, click **Choose**. The Control File Configuration screen for collaboration items appears. Click the **Common** tab. The Common screen can differ slightly depending on the loader you are using.

Figure 2–7 Control File Configuration Screen

For Extractors, the basic Common screen is shown below.

Figure 2–8 Basic Control File Configuration Screen

The Stream Extractor contains an additional Set Precision checkbox in the Common tab, which allows you to set the precision of the “Quantity” column value.

If “Set Precision” is checked, all Quantity values extracted will be rounded to the Number of Decimal Places you specify in the text box. Positive integers and zero are acceptable values for “Number of decimal places”.

The Leaf Stream Loader has additional fields listed below:

- Create Collaboration Items
- Automatic SITC (stream item type code) 0 to 1 Mapping

The Aggregate Stream Loader has an additional field:

- Automatic SITC (stream item type code) 0 to 1 Mapping

In the Creation Date Format field (if applicable), select the creation date format from the drop-down menu. In the Creation Date Time Zone field (if applicable), select your location time zone from the drop-down menu.

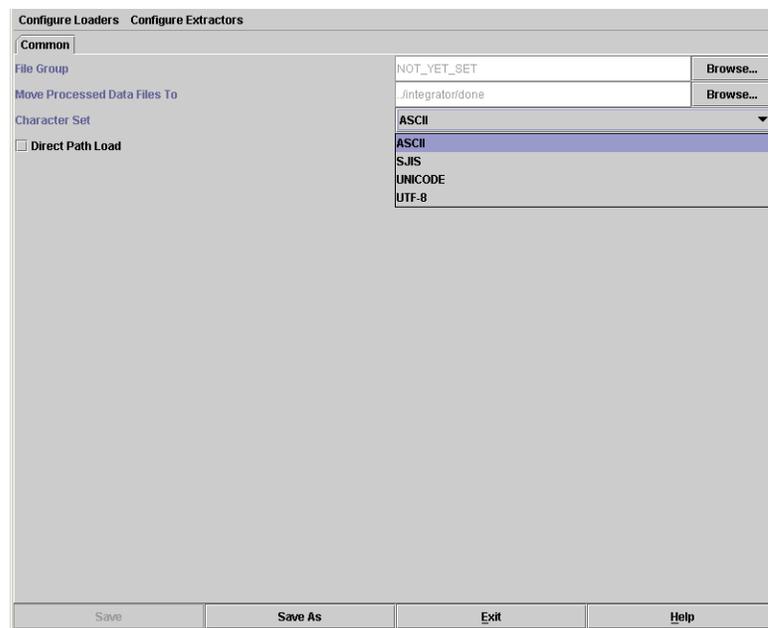
For the Leaf Stream Loader only: Create Collaboration Items allows you to automatically accept collaboration item requests (local and/or partner) based on the Auto Create flag of the company in the client.

If you check SITC 0 to 1 Mapping, any stream item type code that is a zero (0) is automatically mapped to one (1) for the base item stream type.

The Master Data Loader Common screen has an extra checkbox called **Direct Path Load**. Select the **Direct Path Load** checkbox to add data directly to the database. The VCC Master Data Loader allows you to add (or update) information directly to your database using the Direct Load feature. The Direct Load feature bypasses the VCC server and adds data directly to your database. The performance increase is dramatic. Currently, you can only use the Direct Load tool when adding product data. In most instances, you would want to use it when initially populating your database with product data. Although direct load bypasses the VCC Server, the VCC Server must be running while doing a direct load. If it is unchecked, data is loaded through the conventional method. If checked, it is loaded with the Direct Path method. This feature is currently limited to the product hierarchy. Master data cannot be removed using this feature.

Note: The Direct Path Loading method will reject duplicate relationship records, while the conventional method does not reject duplicate relationship records.

Figure 2–9 Master Data Loader Common Screen



6. In the File Group field browse to the file group for this loader if you are using file groups. File groups are not applicable for data extracts.

A file group is a collection of data files with similar names or file extensions that you can load easily. VCC automatically loads all files in a specified directory or all files beginning with the file name characters you specify. It behaves similarly to a wildcard function.

Here are some file group examples:

Example 1:

c:\data\load

In this case, the Integrator will load all files in the load directory

Example 2:

c:\data\load\forecasts_

In this case, the Integrator will load all files in the load directory that begin with forecasts_

This is the equivalent of the wildcard forecasts_*.*

7. For Loaders, in the Move Processed Data Files To field, browse to the directory in which you want to store your completed, rejected, and loader log files.

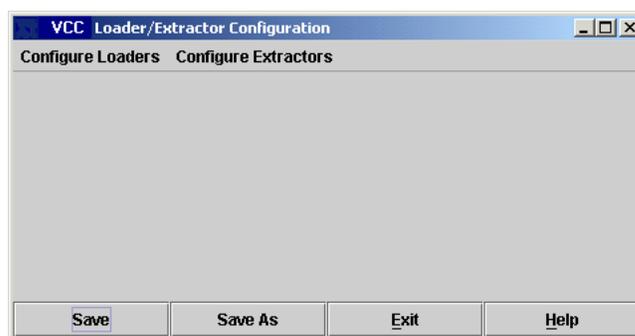
For Extractors, in the Save Extracted Data Files To field, browse to the directory in which you want to store your extracted files. This field appears only for extractor types that cannot be retrieved through the Client's Extract module.
8. In the Character Set field, the default is UTF-8. You may also select one of the other valid available Java encoding values (ASCII, SJIS, or UNICODE). Select the character set based on your data file. If the data file type is ANSI, then select ASCII.
9. In the Creation Date Format field (if applicable), select the creation date format from the drop-down menu.
10. In the Creation Date Time Zone field (if applicable), select your location time zone from the drop-down menu.

Configuring a Delimiter

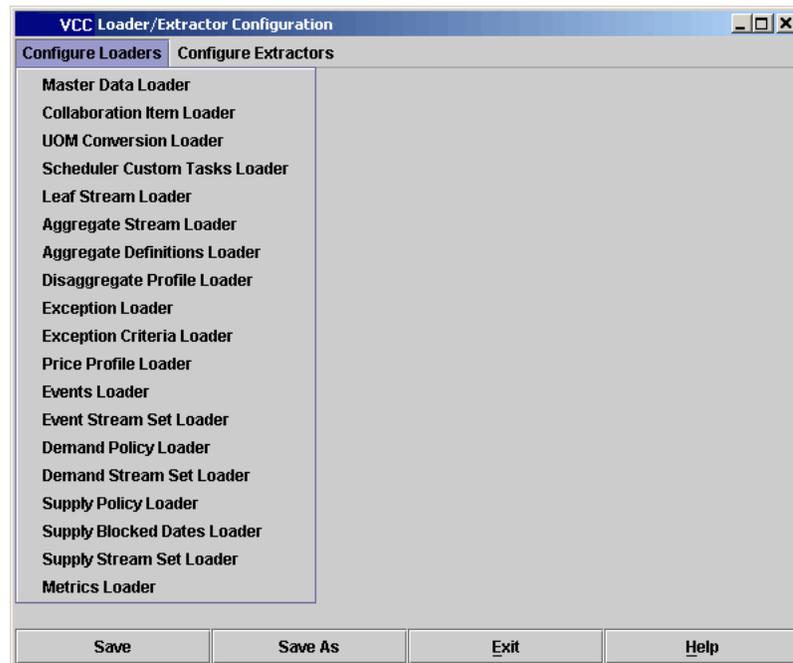
A delimiter is simply the character used to separate the items in your file. It is usually a comma or a tab. For each control file you configure, you must specify the delimiter used to separate the elements in the data file. To specify a file delimiter.

1. Select **VCC - VCC Configurations - VCC Loader Extractor Configurations** from the VCC program group. The **Control File Configurations** screen appears.

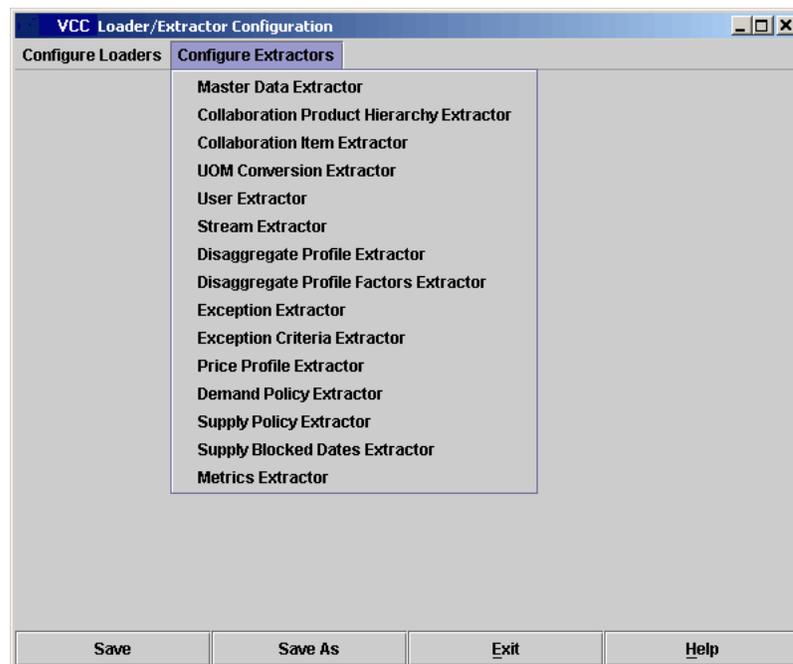
Figure 2–10 Control File Configuration Screen



2. For loaders, click **Configure Loaders**. The drop-down menu of available loaders appears.

Figure 2–11 VCC Loader/Extractor Configuration

For extractors, click the **Configure Extractors** tab. The drop-down menu of available extractors appears.

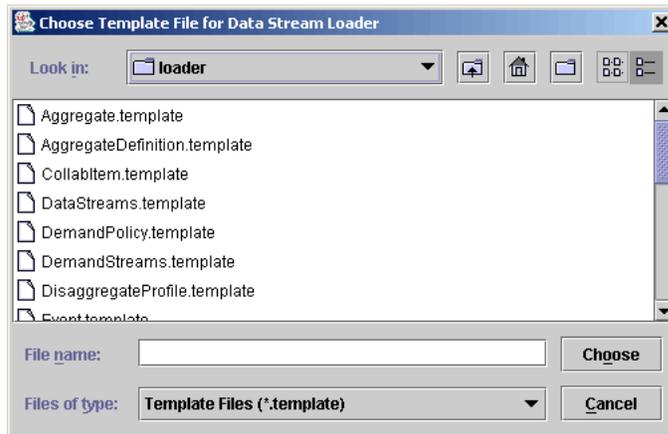
Figure 2–12 Configure Extractors Tab

3. Select the control file or template file from the drop-down menu.
4. For the Loader only, in the **Choose Template Files** pane, select your loader template file or control file. If this is the first time you are creating a control file, select the template file in the VCC **Integrator/template/loader** directory and create

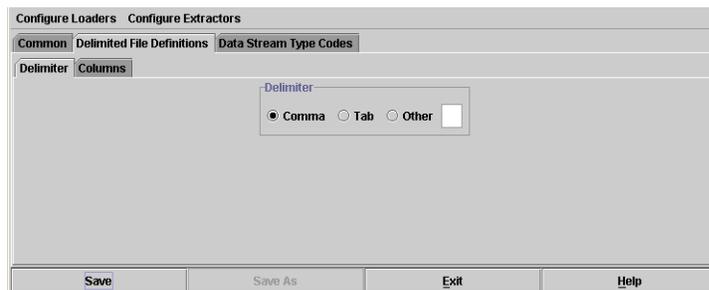
your control file from it. Refer to the sections below for the appropriate name of each specific template file.

For the Stream Extractor, select the template file from:
Integrator/template/extractor.

Figure 2–13 Choose Templates Screen



5. Click the **Delimited Definitions** tab. The **Delimited Definitions** pane appears. Click the **Delimiter Definition** tab.



6. Select the delimiter used in the data file you want to load or the delimiter you want to use to separate the data in the extracted file. You can select **Comma**, **Tab**, or **Other**. If you select **Other**, enter the delimiter of your choice in the field provided. (The delimiter can be only a single character). Do not use a delimiter that may be used as a variable in an actual record.

Configuring Column Definitions and Global Column Definitions

The column definitions for your data load or data extraction specify the particular fields that occur in your load file and the position of each field in the row; or the position in which you want the data to appear in the extracted file. The control file for each specific type of data load or data extract has its own unique fields that you must define. For a description of the fields for each data load type, refer to the appropriate data loader section; For a description of the fields for each data extraction type, refer to the appropriate extractor section.

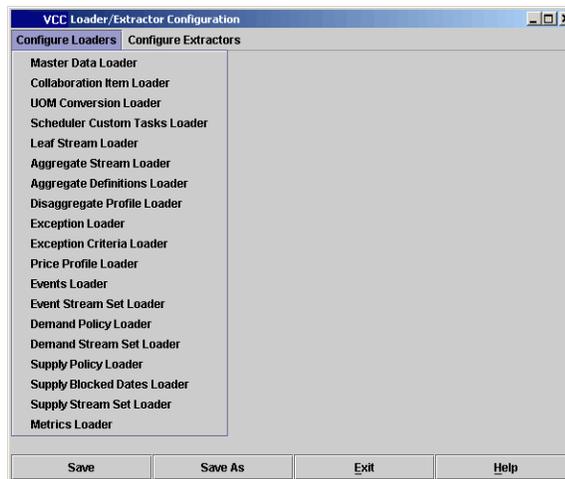
When you are defining columns, you can designate columns that occur repeatedly and in the same column position as global values. Defining a global value allows you to omit it from the actual data load file; or, for a data extract, it allows you to add an entry to the file that does not appear in the extracted data. The global value specified is loaded as specified in its global definition.

To define the column values and global values for a data load or data extract, follow the steps given below:

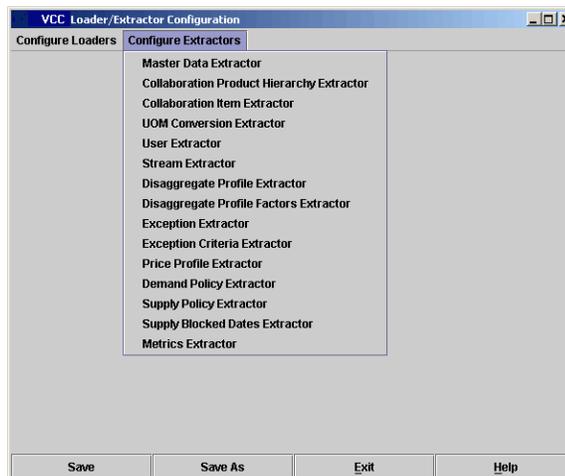
1. Select **VCC - VCC Configurations - VCC Loader Extractor Configurations** from the VCC program group. The **Control File Configurations** screen appears.



2. For loaders, click **Configure Loaders**. The drop-down menu of available loaders appears.

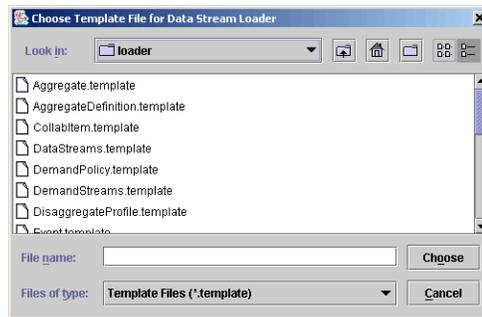


For extractors, click the **Configure Extractors** tab. The drop-down menu of available extractors appears.

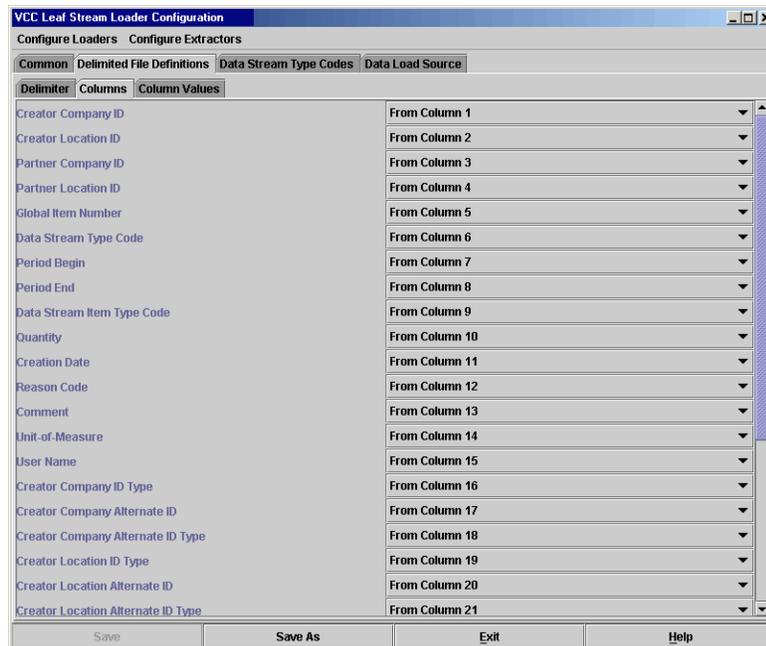


3. Select the Loader, select the appropriate control file or template file from the drop-down menu.

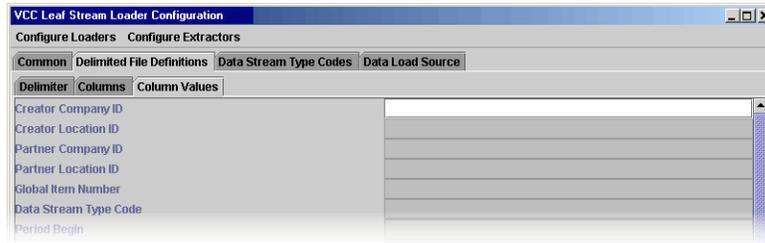
- In the **Choose Template Files** pane, select your loader template file or control file. If this is the first time you are creating a control file, select the template file in the **VCC Integrator** directory and create your control file from it.



- Click the **Delimited Definitions** tab.
- Click the **Define Columns** tab. This allows you to specify the column position for each of the fields that appear in the file you intend to load or extract. In the example pane below, a collaboration item loader file contains five columns: Creator Company ID, Creator Location ID, Partner Company ID, Partner Location ID, and Product. If you intend to define a field with a global value, you must select “Not From Column.” You then can set a global value for the field using the **Define Column Values** tab.
- In the sample screen below, columns are designated as column-based; that is, their values are derived from the data file.



- If you are defining global values for specific fields in your data file, such as the Creator Company ID, select “Not From Column” from the Creator Company ID drop-down. Once this is selected, an editable field will appear in the **Column Values** tab for Creator Company ID. A global value can now be entered for the selected field.



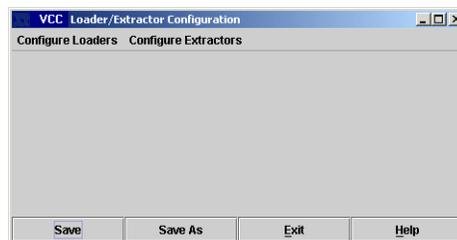
If you are not defining any global values, no editable fields will appear in the Column Values tab.

Configuring the Default Data Stream Type Codes for a Data Load

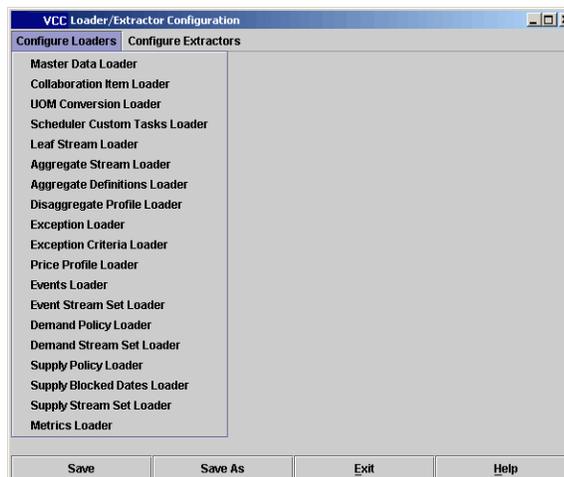
Some control files require you to change the default data stream name mappings and data stream item type name (substream) mappings to match those used in your specific data files or your partner's data files.

To map your data stream names, follow the steps given below:

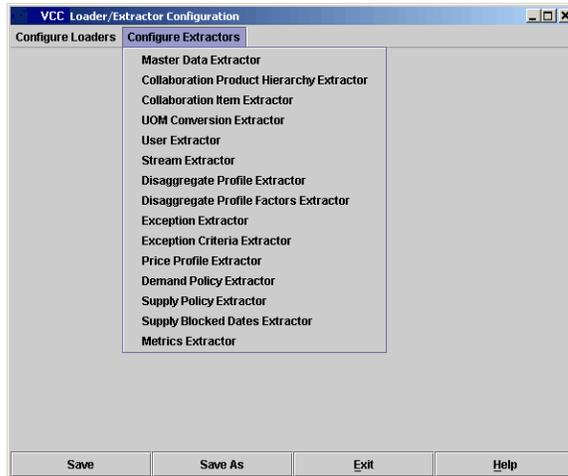
1. Select **VCC - VCC Configurations - VCC Loader Extractor Configurations** from the VCC program group. The **Control File Configurations** screen appears.



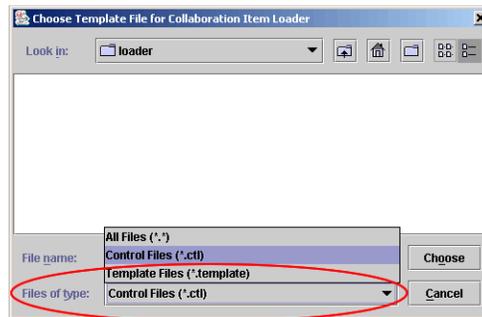
2. For loaders, click **Configure Loaders**. The drop-down menu of available loaders appears.



For extractors, click the **Configure Extractors** tab. The drop-down menu of available extractors appears.

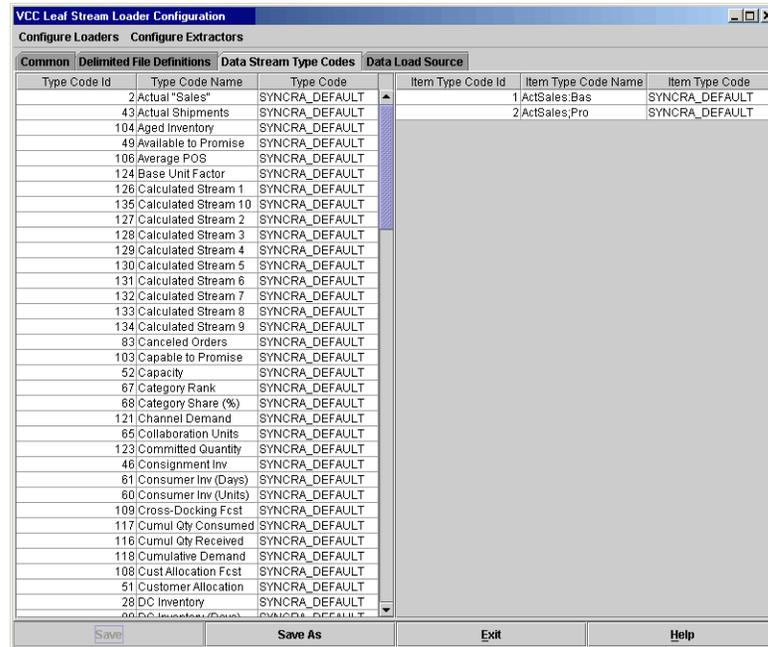


- Select “Control Files (*.ctl)” from the **Files of Type** drop-down and select the control file you would like to load.



- In the Choose Template Files pane, select your loader template file or control file. If this is the first time you are creating a control file, select the template file in the VCC Integrator directory and create your control file from it.
3. Click the **Data Stream Type Codes** tab. For example, if you are using the POS (Units) data stream that contains three substreams (Base, Seasonal, and Promo) and you want to change the data stream Type Code ID or any of the substream Item Type Code IDs, you can do it in the **Data Stream Type Codes** pane. Once you change a Type Code ID or a Item Type Code ID, they will appear in the control file. If you do not change a Type Code ID or an Item Type Code ID and accept the **SYNCRA_DEFAULT**, they do not appear in the control file.

Note: Do not use apostrophes (') in type code names or item type code names.



- Click on a data stream. Its substreams appear in the right-hand portion of the screen. To change a Type Code ID, double-click in the Type Code column and enter the new Type Code ID; to change an Item Type Code ID, double-click in the Item Type Code column and enter the new Item Type Code ID. The type code ID and Item Type Code ID can be numeric or alphanumeric.

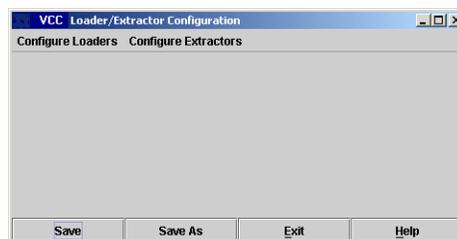
Note: The columns in the Data Streams Type Code tab are sortable by clicking the grey column headers. Columns can be sorted in either ascending or descending order.

- If you do not want to map type code or item type codes, you can accept the VCC default type codes or item type codes.

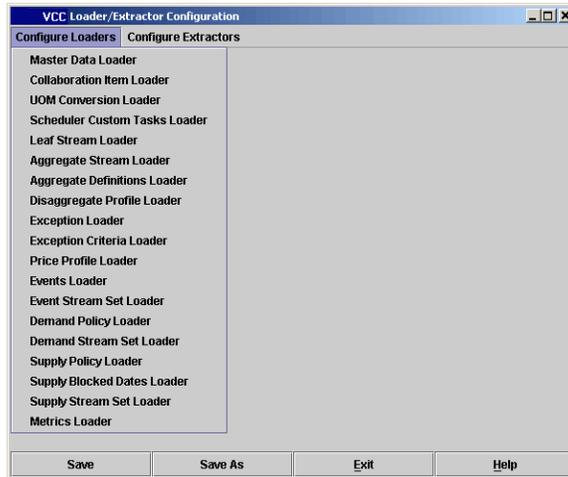
Configuring the Data Load Control File for Leaf Stream Loading

Data load source configuration applies to loading data streams only. To specify the data load source for data stream load control file, follow the steps described below:

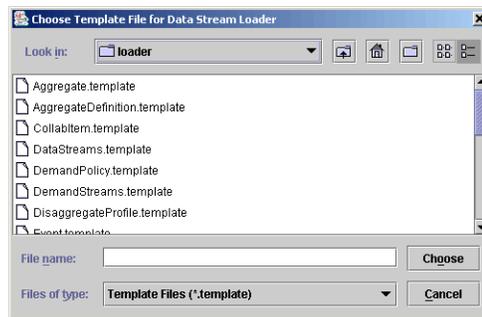
- Select **VCC - VCC Configurations - VCC Loader Extractor Configurations** from the VCC program group. The **Control File Configurations** screen appears.



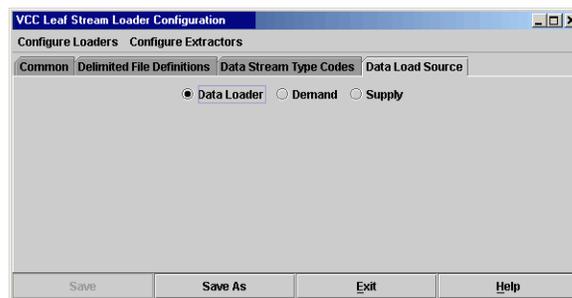
- For loaders, click **Configure Loaders**. The drop-down menu of available loaders appears.



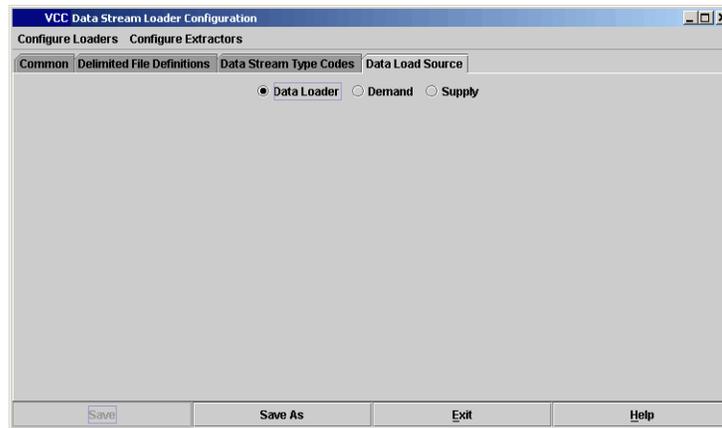
3. Select "Leaf Stream Loader."
4. For the Leaf Stream Loader, in the **Choose Template Files** pane, select the **LeafStreams.template** template file or control file



5. Click the **Data Load Source** tab.



6. In the Data Load Source screen, select "Data Loader," "Demand," or "Supply."

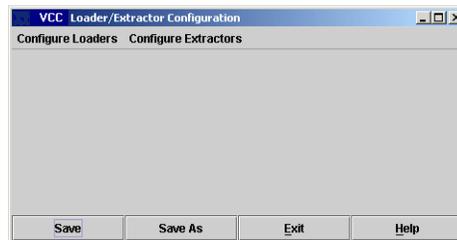


7. Save the control file. The control file is saved to the path specified.

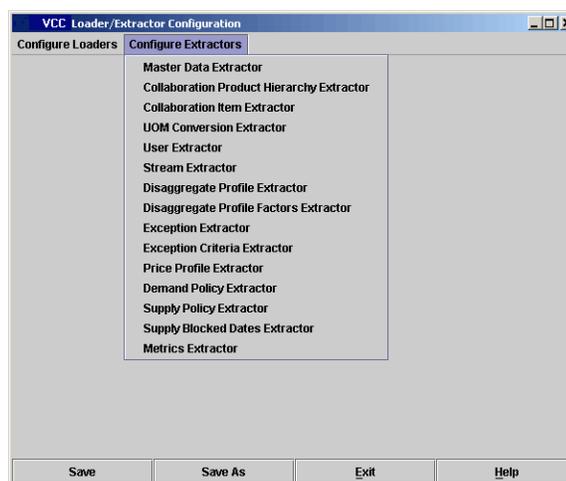
Configuring the Control File for the Stream Extractor

The Stream Extractor uses the ExtractDataStream.template file. Data source extract configuration applies to extracting data streams only. To specify the data extract source for the data extract control file, follow the steps explained below:

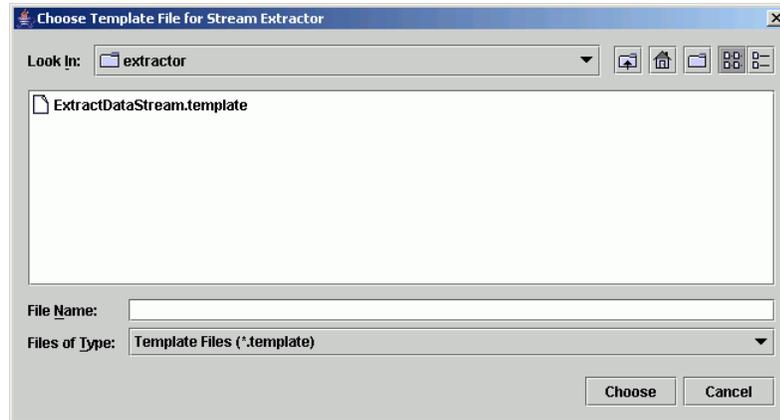
1. Select **VCC - VCC Configurations - VCC Loader Extractor Configurations** from the VCC program group. The **Control File Configurations** screen appears.



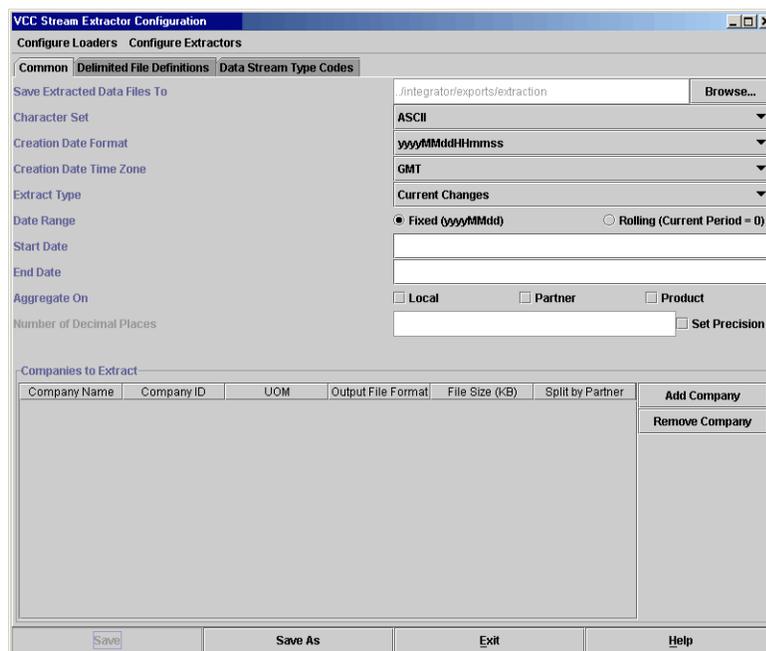
2. For extractors, click **Configure Extractors**. The drop-down menu of available extractors appears.



3. Select "Stream Extractor" from the drop-down list. You will be prompted to choose the template file for Stream Extractor.



4. Load the ExtractDataStream.template. The Common tab for Stream Extractor appears.



5. Extract Types include the following:
 - Current Changes: Extracts the current version of all data streams, regardless of creation date.
 - Manual Changes: Extracts the latest version of all changes entered in the UI since the last manual changes extract per company.
 - All Changes: Extracts the latest version of all changes since the last “all changes” extract per company, including UI, system generated or data loaded.
6. Configure common settings, and select Companies to Extract by clicking the Add Company button.

For Aggregate data extraction from the aggregate table, select “Aggregate On” check boxes based on your requirement. Only current data will be extracted at aggregate level.

Example:

If product checkbox is selected, then leaf on local, leaf on partner, and aggregate on product data will be extracted (not at and below data).

- The Add Company dialog window appears. Choose a company from the Company Name drop-down, and click Add.



If you would like to have data in a separate file for your trading partners, then choose the Split By Partner option.

- Repeat steps 5 and 6 until the desired companies have been selected. To remove companies from the Extract list, select the company you wish to remove and click Remove Company.

Companies to Extract						
Company Name	Company ID	UOM	Output File Format	File Size (KB)	Split by Partner	
Nabisco	10-124-1107	Stat Units	Always Zip		false	<input type="button" value="Add Company"/> <input type="button" value="Remove Company"/>
Stratforth Shovel, ...	20-222-2222	Stat Units	Always Zip		false	
Quick Stop	50-555-5555	Stat Units	Always Zip		false	

- Click the Data Stream Type Codes tab to configure type codes to extract. Select the Type Code in the left pane to view associated Item Type Codes in the right pane. Checking the On/Off check boxes will determine which Type Codes are included in the extract. For more information on type codes and how to configure them, see Step 3 through 5 in "Configuring the Default Data Stream Type Codes for a Data Load".

VCE Stream Extractor Configuration						
Common		Delimited File Definitions		Data Stream Type Codes		
On/Off	Type Code Id	Type Code Na...	Type Code	On/Off	Item Type Code	Item Type Code
<input checked="" type="checkbox"/>	2	Actual "Sales"	SYNCRA_DEF...	<input type="checkbox"/>	1	Categ Rank
<input checked="" type="checkbox"/>	43	Actual Shipme...	SYNCRA_DEF...			SYNCRA_DEF...
<input checked="" type="checkbox"/>	104	Aged Inventory	SYNCRA_DEF...			
<input type="checkbox"/>	49	Available to Pr...	SYNCRA_DEF...			
<input checked="" type="checkbox"/>	106	Average POS	SYNCRA_DEF...			
<input type="checkbox"/>	124	Base Unit Factor	SYNCRA_DEF...			
<input type="checkbox"/>	126	Calculated Str...	SYNCRA_DEF...			
<input type="checkbox"/>	135	Calculated Str...	SYNCRA_DEF...			
<input type="checkbox"/>	127	Calculated Str...	SYNCRA_DEF...			
<input checked="" type="checkbox"/>	128	Calculated Str...	SYNCRA_DEF...			
<input type="checkbox"/>	129	Calculated Str...	SYNCRA_DEF...			
<input checked="" type="checkbox"/>	130	Calculated Str...	SYNCRA_DEF...			
<input type="checkbox"/>	131	Calculated Str...	SYNCRA_DEF...			
<input type="checkbox"/>	132	Calculated Str...	SYNCRA_DEF...			
<input type="checkbox"/>	133	Calculated Str...	SYNCRA_DEF...			
<input checked="" type="checkbox"/>	134	Calculated Str...	SYNCRA_DEF...			
<input type="checkbox"/>	83	Canceled Orde...	SYNCRA_DEF...			
<input type="checkbox"/>	103	Capable to Pro...	SYNCRA_DEF...			
<input checked="" type="checkbox"/>	52	Capacity	SYNCRA_DEF...			
<input checked="" type="checkbox"/>	67	Category Rank	SYNCRA_DEF...			
<input type="checkbox"/>	68	Category Shar...	SYNCRA_DEF...			
<input type="checkbox"/>	121	Channel Dem...	SYNCRA_DEF...			
<input type="checkbox"/>	65	Collaboration ...	SYNCRA_DEF...			
<input type="checkbox"/>	123	Committed Ou...	SYNCRA_DEF...			
<input type="checkbox"/>	46	Consignment I...	SYNCRA_DEF...			
<input type="checkbox"/>	61	Consumer Inv ...	SYNCRA_DEF...			
<input type="checkbox"/>	60	Consumer Inv ...	SYNCRA_DEF...			
<input type="checkbox"/>	109	Cross-Docking...	SYNCRA_DEF...			
<input type="checkbox"/>	117	Cumul Qty Con...	SYNCRA_DEF...			
<input type="checkbox"/>	116	Cumul Qty Rec...	SYNCRA_DEF...			
<input type="checkbox"/>	118	Cumulative De...	SYNCRA_DEF...			
<input type="checkbox"/>	108	Cust Allocation...	SYNCRA_DEF...			
<input type="checkbox"/>	51	Customer Allo...	SYNCRA_DEF...			
<input type="checkbox"/>	28	DC Inventory	SYNCRA_DEF...			

You must select at least one Item Type Code if you have checked the On/Off checkbox for an associated Type Code. If no Item Type Codes are selected for a given Type Code, that Type Code will not be included in the extract file.

10. Click Save As to save the new control file (.ctl) that you have configured.

Value Chain Collaboration Log Files

This section deals with the VCC log files description.

VCC Log File Overview

Most VCC components maintain one or several related log files that contain information about the specific component area.

VCC Log File Overview Table

Table 2–1 Log Files

Log Name	Description	Log Location
Integrator		
Adaptor.log	Always generated when Integrator is running. Reports any errors that are not database or data file related, which includes all errors codes in the range 0-10-106-100, 0-10-106-102 to 0-10-106-112.	Go to the designated drive on the machine where the Integrator is installed. Go to Syncra\ integrator\logs\Adaptor.log
Adaptor_Launch.log	This file is generated when the Adapter.exe is executed.	Go to the designated drive on the machine where the Integrator is installed. Go to Syncra\ integrator\Adaptor_Launch.log
Syncra_Configurations_Launch.log	This file is generated when Syncra_Configuration.exe is executed.	Go to the designated drive on the machine where the Integrator is installed. Go to Syncra\Configuration\ Syncra_Configurations_ Launch.log
Retrieve_Properties_Launch.log	This file is generated when Retrieve_Properties.exe is run	Go to the designated drive on the machine where the Integrator is installed. Go to Syncra\configuration\Retrieve_ Properties_Launch.log
File_Configuration_Launch.log	This file is generated when File_Configuration.exe is run.	Go to the designated drive on the machine where the Integrator is installed. Go to Syncra\configuration\File_ Configuration_Launch.log
Syncra_Configuration_Launch.log	This file is generated when Syncra_Configuration.exe is run.	Go to the designated drive on the machine where the Integrator is installed. Go to Syncra\configuration\Syncra_ Configuration_Launch.log

Table 2–1 (Cont.) Log Files

Log Name	Description	Log Location
Syncra_Loader_Extractor-Configuration_Launch.log	This file is generated when the Syncra_Loader-Extractor_Config.exe is executed. It reports any problems during configuration.	Syncra\integrator\Syncra_Loader_Extractor_Configuration_Launch.log
Syncra_Integrator_Launch.log	This file is generated when the Syncra_Integrator.exe is executed. It reports any problems not addressed in other Integrator logs.	Go to the designated drive on the machine where the Integrator is installed. Go to Syncra\integrator\Syncra_Integrator_Launch.log.
data_retrieval.log	Generated when Process Retrieval request is executed. It reports the progress and failure during execution.	Can be located at Syncra\integrator\logs\data_retrieval.log where the integrator is installed
extractors.log	Generated when an individual extraction is executed (UOM, Stream Extract, Users etc.). Reports the failure and progress during execution.	Can be located at machine where integrator is installed and in Syncra\integrator\logs\extractors.log.
Send.log	Generated when Extract Non-Published data Stream is executed. It reports the failure and progress during execution.	Can be located on the machine where Integrator is installed and in Syncra\integrator\Logs\send.log.
Import.log	Contains information about loading timings and fatal exceptions, if any occur during the loading process. Once this file is deleted, it will not be recreated.	Go to the designated drive on the machine where the Integrator is installed. Go to Syncra\integrator\logs\Import.log
Oracle		
dberror.log	Logs all Oracle exceptions	Syncra archive directory.
[Executable Filename].log	All executables contained in the Syncra\Bin directory will generate a log file when run. Log file format: [Executable Filename].log	Go to the designated drive on the machine where the Scheduler is installed. Go to Syncra\bin\[filename].log
Load_Test_Language_Launch.log	This file is generated when Load_Text_Language.exe is run.	Go to the designated drive on the machine where the Scheduler is installed. Go to Syncra\db\Oracle\scripts\Load_Test_Launguage_Launch.log
Server		
Server.log	This log is created and written to by WebLogic Server.	Go to the designated drive on the machine where the Server is installed. Go to Syncra\Server\Server.log

Table 2–1 (Cont.) Log Files

Log Name	Description	Log Location
SyncraDomain.log	This log is created and written to by WebLogic Server.	Go to the designated drive on the machine where the Server is installed. Go to Syncra\Server\SyncraDomain.log
access.log	This log is created and written to by WebLogic Server.	Go to the designated drive on the machine where the Server is installed. Go to Syncra\server\access.log
SyncraClient.log	This log is created and written to by Syncra Client to report any possible unhandled exceptions.	Go to the designated drive on the machine where the Server is installed. Go to Syncra\server\SyncraClient.log

Database Guidelines

This chapter contains the following topics:

- [VCC Schema Considerations](#)
- [VCC Database Maintenance](#)

VCC Schema Considerations

This section contains the following topics:

- [System Requirements](#)
- [Recommended VCC Schema Instance Configuration](#)
- [Initialization Parameters](#)
- [VCC Schema Creation Overview](#)
- [Creating a New Schema Owner](#)
- [Creating Configuration Tables](#)
- [Customizing the Database Configuration](#)
- [Migrating the Syncra V6.3 Schema to the VCC 12.0 Schema](#)

System Requirements

VCC database requirements are:

- Oracle Version: Oracle 9i Enterprise Edition Release 9.2.0.3.0 with the Partitioning Option.

To install Oracle 9i Release 2 (9.2.0.3.0) follow the steps listed below

- Install Oracle9i Enterprise Edition Release 2 (9.2.0.3.0)
 - Install the Oracle9i Release 2 patch set 2761332 into the 9.2.0.3.0 Oracle Home using the Oracle Universal Installer
- Database character set must be UTF8

Recommended VCC Schema Instance Configuration

It is recommended that you modify the following for the VCC schema instance:

- Tablespaces
- Rollback Segments
- Online Redo Log File

- Database Model
- Initialization Parameters

Tablespaces

It is recommended that you create tablespaces that are locally managed with the extent management clause in Table 1, “Tablespace Recommendations for the Extent Management Clause”.

Details on how to create locally managed tablespaces can be obtained from copying the following link and pasting it into your browser window:

http://metalink.oracle.com/metalink/plsql/ml2_documents.showDocument?p_id=93771.1&p_database

Also, distributing the I/O for file access can improve database performance dramatically. It is recommended that you place all tablespaces on a separate disks.

The tablespace names in Table 1, “Tablespace Recommendations for the Extent Management Clause” are variable. Your tablespace names may be different. For details on customizing tablespaces, see “[Customizing Tablespaces](#)”.

Table 3–1 Tablespace Recommendations for the Extent Management Clause

Tablespace Name	Extent Management Clause
SYNCRA_DATA_MED	LOCAL AUTOALLOCATE
SYNCRA_IDX_MED	LOCAL AUTOALLOCATE
SYNCRA_DATA_SMALL	LOCAL AUTOALLOCATE
SYNCRA_IDX_SMALL	LOCAL AUTOALLOCATE
SYNCRA_TEMP	LOCAL UNIFORM
SYNCRA_IDX_TEMP	LOCAL UNIFORM
TEMPORARY	LOCAL UNIFORM

Rollback Segments

It is recommended that the database have Automatic Undo Management (AUM). A database running in automatic undo management mode transparently creates and manages undo segments. Oracle Corporation strongly recommends using automatic undo management, because it significantly simplifies database management and removes the need for any manual tuning of undo (rollback) segments.

For details on how to use Automatic Undo Management can be obtained from the following link:

http://metalink.oracle.com/metalink/plsql/ml2_documents.showDocument?p_database_id=NOT&p_id=135090.1

Online Redo Log File

To minimize the frequent switching of log files during batch operations, redo log files should be appropriately sized. It is recommended that you have at least eight log files of at least 100 MB.

Database Model

It is recommended that the database run in Non-Archive log Mode.

Initialization Parameters

It is recommended that you set the initialization parameters in Table 2, “Initialization Parameter Recommendations” to the recommended value in the init.ora file.

Table 3–2 Initialization Parameter Recommendations

Parameter Name	Recommended Value
pga_aggregate_target	PGA_AGGREGATE_TARGET = (<total_mem> * 80%) * 50% where <total_mem> is the total amount of physical memory available on the system. More details on how to tune this parameter can be obtained from the following link: http://otn.oracle.com/docs/products/oracle9i/doc_library/release2/server.920/a96533/memory.htm#49321
HASH_JOIN_ENABLED	true
OPEN_CURSORS	800
OPTIMIZER_MODE	choose
Db_file_multiblock_read_count	32
Db_block_size	8192
compatible	9.2.0.3.0
Undo_tablespace	auto (undo - ts)
_job_queue_interval	1
job_queue_processes	cannot be set to 0

VCC Schema Creation Overview

The steps to build a new VCC schema include:

1. Checking the system requirements.
2. Creating a New Schema Owner.
3. Creating Configuration Tables.
4. Customizing the Database Configuration.
5. Creating Different Partitions in Different Tables.
6. Building the VCC Schema

Creating a New Schema Owner

To create a new schema owner, follow the steps below:

1. Log into SQL* Plus as
sys
2. Go to
[SYNCRA_HOME]/db/Oracle/spool
3. Run
@../setup/setup
to create a schema owner and grant him the necessary privileges.

The schema owner name must not exceed 25 characters and must be in uppercase.

Note: The tablespace configured for the SYNCRA_TEMP tablespace should be used as the Schema Owner's default tablespace. Any other VCC schema tablespace should not be made the default tablespace of the schema owner because it could create tablespace fragmentation.

Creating Configuration Tables

Log in to SQL*Plus as the schema owner.

1. Change your working directory to [SYNCRA-HOME]/db/Oracle/spool
2. Run the following script file: @./lib/create_config.sql

Customizing the Database Configuration

Customizing the database configuration includes:

- Customize your database configuration
- Customize Tablespaces
- Specify Tablespaces For Non-Partitioned Tables
- Specify Tablespaces For Partitioned Tables
- Create Different Partitions in Different Tablespaces

Customizing Tablespaces

To modify the tablespace to be used by VCC objects are:

1. Edit the tablespace_value column in SYNCRA_TABLESPACES table to specify tablespaces for non-partitioned objects
2. Edit the following tables to specify tablespace values for partitioned objects:
SYNCRA_TYPECODE_PARTITIONS
SYNCRA_COMPANY_PARTITIONS

Specifying Tablespaces For Non-Partitioned Tables

VCC objects will be created in the tablespace values as specified in the SYNCRA_TABLESPACES table.

The structure of VCC tablespaces is given below:

- TABLESPACE_PARAMETER
- TABLESPACE_VALUE

Note: The tablespace specified for v_temporary parameter should be a temporary tablespace.

Small tables will be created in the tablespace specified for the v_Syncra_data_small parameter and their indexes will be created in the tablespace specified for v_Syncra_idx_small.

Medium sized tables will be created in the tablespace specified for v_Syncra_med parameter and their indexes will be created in the tablespace specified for v_Syncra_idx_med.

Objects that are transient will be created in the tablespace specified for v_Syncra_temp and their indexes will be created in v_Syncra_idx_temp. Objects created in this tablespace are permanent objects, but they will be frequently dropped and truncated.

Temporary objects will be created in temporary tablespace specified for v_temporary.

Specifying Tablespaces For Partitioned Tables

Partitioned Tables and Indexes

The STREAM TYPE CODE/COMPANY_ID is used as the partition key for partitioned tables. The tables partitioned by STREAM TYPE CODE are:

- STREAM
- STREAM_ITEM
- CURRENT_STREAM
- AGGREGATES

The tables partitioned by COMPANY ID are:

- COLLABORATION
- COLLABORATION_ITEM
- Lookup Tables

Creating Different Partitions in Different Tablespaces

Typecode partitions

When typecode partitions are created, physical storage attributes, data, and index tablespace information for that partition will be retrieved from SYNCRA_TYPECODE_PARTITIONS.

Table 3–3 Description of Columns in SYNCRA_TYPECODE_PARTITIONS

Column	Description
TYPECODE	Stream Type Code
STREAM_DATA	Data tablespace value for the stream partition
STREAM_INDEX	IDX tablespace value for the stream partition
STREAM_ITEM_DATA	Data tablespace value for stream_item partition
STREAM_ITEM_INDEX	IDX tablespace value for the stream_item partition
CURRENT_STREAM_DATA	Data tablespace value for current_stream partition
CURRENT_STREAM_INDEX	IDX tablespace value for current_stream partition
AGGREGATES_DATA	Data tablespace value for aggregates
AGGREGATES_INDEX	IDX tablespace value for aggregates

To spread partitions across different tablespaces change the data and index tablespace values appropriately.

Modifying SYNCRA_COMPANY_PARTITIONS

When company partitions are created for Collaboration and Collaboration Item tables, physical storage attributes, and data and index tablespace information for that partition will be retrieved from SYNCRA_COMPANY_PARTITIONS. Tablespace

values for data and index segments of Lookup Tables are obtained from tablespace values configured in `v_Syncra_med` and `v_Syncra_idx_med` parameters.

Table 3–4 Description of Columns in SYNCRA_COMPANY_PARTITIONS

Column	Description
COMPANY_ID	Company_id
COLLABORATION_DATA	Data tablespace for collaboration partition
COLLABORATION_INDEX	IDX tablespace for collaboration partition
COLLABORATION_ITEM_DATA	Data tablespace for the ci partition
COLLABORATION_ITEM_INDEX	IDX tablespace for the ci partition

To spread partitions across different tablespaces change the data and index tablespace values appropriately.

Building the VCC Schema

To build the VCC schema, first ensure that the `NLS_LANG` environment variable is NOT set, then follow these steps:

1. Log in to SQL*Plus as the schema owner.
2. Go to `[SYNCRA_HOME]/db/Oracle/spool`

Note: it is important that you run the `syncra_build.sql` command from the spool directory.

To build a new VCC Schema for a database that does not contain any prior VCC data, enter the following command:

```
@../lib/syncra_build.sql
```

Migrating the Syncra V6.3 Schema to the VCC 12.0 Schema

All leaf-level processing and aggregate-level processing must be completed before migrating a Syncra version 6.2 schema to Syncra version 6.3.

To migrate the Syncra V6.2 schema to V6.3 you must:

1. Check System Requirements.
2. Ensure that all Syncra processes and servers are halted.
3. Please copy the `R12_VCC_DB_patch.sql` in `<VCC_12.0_HOME>/db/Oracle/lib` and then run `SQL> @..\lib\R12_VCC_DB_patch.sql`.
4. Check for errors in the log files `migrage'DBUSER'.log` contained in the spool directory.
5. For optimal performance, analyze the schema after migration using the following command:


```
exec dbms_utility.analyze_schema('<SCHEMA>','ESTIMATE',NULL,5);
```
6. Restart the EJB Server, JSP Engine, and Web Server.

VCC Database Maintenance

This section contains the following topics:

- [Database Table Maintenance](#)
- [Importing and Exporting a Database for Unix and NT](#)
- [Analyzing the Schema](#)

Database Table Maintenance

Table 5, “Database Tables,” lists the database tables you should maintain. Additional indexes should not be created on tables in VCC schema.

Table 3–5 Database Table Maintenance

Streams	Nature	Table Space	Process	Effecting Factors	Size (Bytes)
Stream_item	Permanent	Check Syncra_typecode_partitions table for tablespace info.	Dataload	Load Size and Revision history attribute of the typecode.	(Distinct context items) * (Number of loaded data periods) * 30 where 30 is the average row length
Current_stream	Permanent	Check Syncra_typecode_partitions table for information.	Dataload	Load Size and Revision History attribute of the typecode.	(Distinct context items) * (number of new periods with data) * 70 where 70 is the average row length
DI_staging_tbl	Permanent	V_Syncra_data_med	Dataload		50
Temp_cs	Permanent	V_Syncra_data_med	Dataload		
COLLABORATION & COLLABORATION ITEM	Permanent	Check Syncra_company_partitions table for tablespace information.	N/A	Number of collaborations. These tables are partitioned by company_id. Each time a company is added a new partition is added to these tables	Collaboration: (number of collaborations) * 23 Collaboration Item: (number of collaboration items) * 36
AGGREGATES	Permanent	Check Syncra_typecode_partitions table for tablespace information.	N/A	Number of aggregates	(number of aggregates)*
Tmp_agg_lookup	Permanent	V_Syncra_data_med	Updating aggregates	Number of aggregates affected by the data load, and the level at which the aggregates are defined.	

Table 3–5 (Cont.) Database Table Maintenance

Streams	Nature	Table Space	Process	Effecting Factors	Size (Bytes)
Tmp_leaf_excpt	Temporary	V_temporary	Exception Processing	Grows very large when many leaf criteria are defined at high aggregate levels (for example, All Products).	
Tmp_excpt_periods	Temporary	V_temporary	Exception Processing	Grows when leaf criteria are created over a large grouping of periods (for example, All Periods).	
tmp_staging_tbl	Temporary	V_temporary	Loading Profiles	Grows when individual price profiles are created at a very high level on the hierarchy.	

Tasks That Use the VCC Temp Tablespace

The following table shows the tasks and parameters affecting the size of VCC space.

Table 3–6 VCC Temp Tablespace

SI#	Scheduled Tasks	Parameters Affecting the Size of VCC Temp
1	Complete Exception Criteria Creation	Number of Aggregate Criteria with a status of pending, Number of aggregates to be created for each pending criteria
2	Extract Supply Blocked Dates	
3	Extract UOMs	
4	Extract Users	
5	Process Aggregate Actions	Number of aggregate exceptions qualifying for In-Process and Resolution Actions. Number of collaboration items under each aggregate exception with an adjust stream action.
6	Process Aggregate Exceptions	Number of Aggregate Criteria. Number of Aggregate Criteria with a status of "Stale" due to hierarchy changes, Rolling Periods, Rolling Period Overlays etc. Number of aggregates that need to be processed to evaluate the criteria. Amount of data change since the last processing run. Number of aggregate exceptions qualifying for Initial actions. Number of collaboration items under each aggregate exception with an adjust stream action. Number of group exception criteria. Number of individual criteria that form the groups.
7	Process Exception Alerts	Number of criteria with E-mail actions specified. Number of exceptions to be sent.

Table 3-6 (Cont.) VCC Temp Tablespace

SI#	Scheduled Tasks	Parameters Affecting the Size of VCC Temp
8	Process Extract Requests	Type of extract. The number of collaborations that exist at the level in the hierarchy.
9	Process Leaf Actions	Number of leaf exceptions qualifying for In-Process and Resolution Actions.
10	Process Leaf Exceptions	Number of Leaf Criteria. Number of Leaf Criteria with a status of "Stale" due to hierarchy changes, Rolling Periods, Rolling Period Overlays etc. Number of collaborations under each criteria. Amount of data change since the last processing run. Number of stream type codes used in the criteria. Number of leaf exceptions qualifying for Initial actions. Number exceptions with an adjust stream action. Number of group exception criteria. Number of individual criteria that form the groups.
11	Purge Jobs Monitor	Size of Job Monitor Items table
12	Purge User Activity	
13	Recalculate Aggregates	Number of aggregates to be recalculated. Amount of data change since the last time aggregates were recalculated. Changes to hierarchy. Aggregates gone dirty because of Rolling Period Overlays, Stat Factor Changes, Truck Load Changes. Number of distinct stream type codes, number of UOMs. Number of collaboration items under each aggregate to be re-calculated. Number of aggregates that have either no-data or no valid collaborations under them any more.
14	Recalculate Disaggregation Factors	Number of Disaggregation Profiles to be recomputed. The Number of Collaboration Items under each Profile to be computed. The range of History Periods included in each profile.
15	Recalculate Metrics	Type of Metric. Number of collaborations under each context being evaluated.
16	Report Usage	Number of companies, Number of collaborations, Number of aggregates for every allocated stream.
17	Roll Criteria	
18	Run And Send Reports	Type of Report, Number of Contexts to be Reported, Number of collaboration items under each context.
19	Run Demand & Lift Factor Batch Requests	Number of Policies, Number of Leaf Policies, Number of Policies with Period Overlay, Range of periods included in every Policy. Number of Aggregate Policies to be disaggregated. Number of collaboration items under each policy. Number of policies with local lift factor stream. Number of eligible lift factor policies at aggregate/leaf level.
20	Run Demand Batch Requests	Number of Policies, Number of Leaf Policies, Number of Policies with Period Overlay, Range of periods included in every Policy. Number of Aggregate Policies to be disaggregated. Number of collaboration items under each policy.
21	Run Lift Factor Batch Requests	Number of policies with local lift factor stream. Number of eligible lift factor policies at aggregate/leaf level.

Table 3–6 (Cont.) VCC Temp Tablespace

SI#	Scheduled Tasks	Parameters Affecting the Size of VCC Temp
22	Run Reports	Type of Report, Number of Contexts to be Reported, Number of collaboration items under each context.
23	Run Safety Stock Batch Requests	Number of Supply Policies. Type of Safety Stock. Plan Horizon in each Policy.
24	Run Supply & Safety Stock Batch Requests	Number of Supply Policies. Plan Horizon in each Policy. Number of output Stream Type Codes. Type or method used to calculate Safety Stock.
25	Run Supply Batch Requests	Number of Supply Policies. Plan Horizon in each Policy. Number of output Stream Type Codes. Type or method used to calculate Safety Stock.
26	Send Promotion Alerts	
27	Send Reports	
28	Update Promotions	Number of Promotions to be updated.
29	Process Events Totals	

Importing and Exporting a Database for Unix and NT

To import or export a database:

Set NLS_LANG to be UTF8 by doing the following

First set NLS_LANG=_.UTF8 and follow the steps described below:

Note: No spaces are allowed in the above command.

1. Import the file with the imp command or export the database with the exp command.
2. Log into SQL Plus as the schema owner.
3. Change the directory to
[SYNCRA_HOME]/db/Oracle/spool
4. Run the following procedure from SQLPlus as the schema owner
exec sequence_reset

Analyzing the Schema

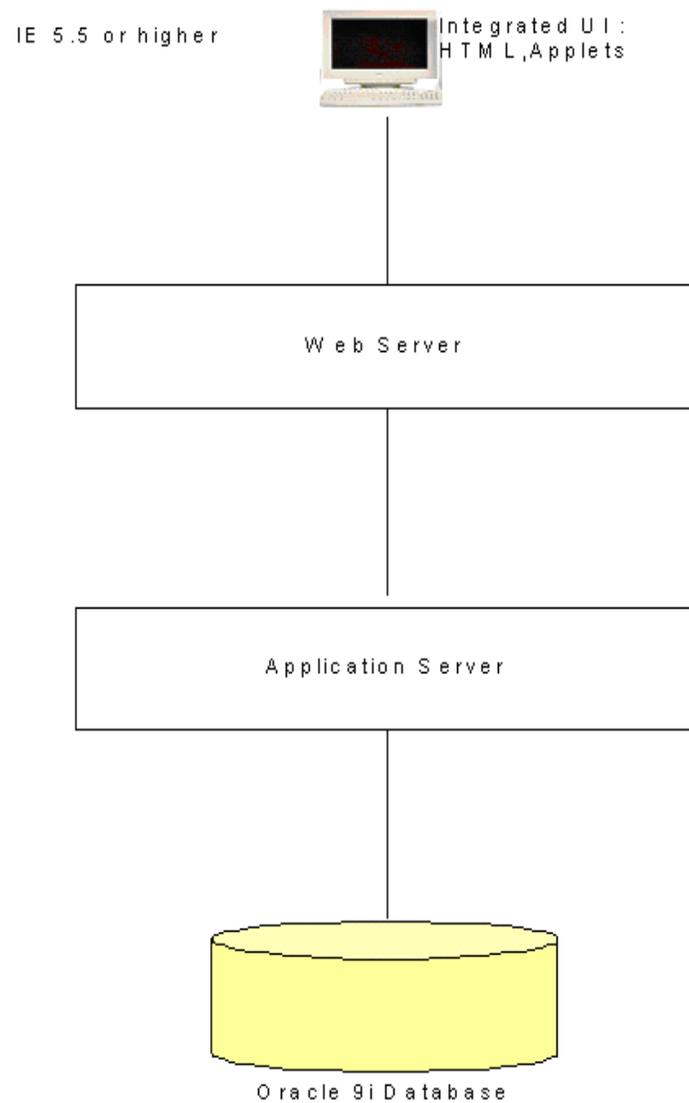
After every dataload, analyze the schema using the following command for optimal performance:

```
exec
```

```
dbms_utility.analyze_schema('<SCHEMAOWNER>','ESTIMATE',NULL,35);
```

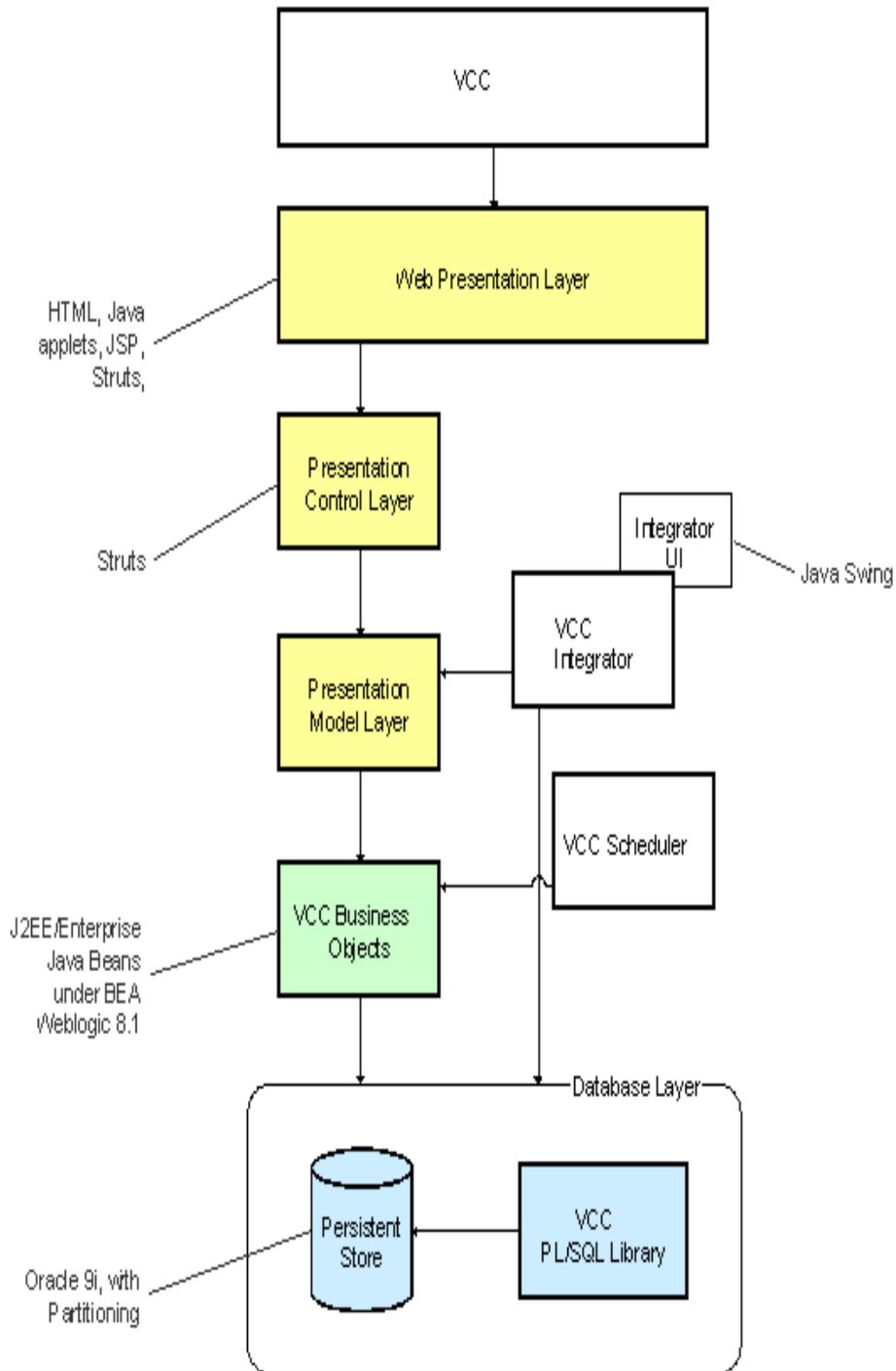
Technical Architecture

The technical architecture deploys an n tiered architecture with a purely web based User Interface.



VCC Architecture Overview

The VCC Collaboration Platform is designed and engineered as a multi-tiered or n-tier architecture, combining proven persistent storage technologies with industry-standard distributed business object and unified presentation methodologies.



Integrator Load/Extracts

This chapter describes the integrator loads and extractors.

Integrator Loads and Extracts

This section contains the following topics:

- [Introduction to the VCC Integrator](#)
- [Master Data Loading and Extraction](#)
- [Running the VCC Integrator](#)

Introduction to the VCC Integrator

This section contains the following topics:

- [About the VCC Integrator](#)
- [About Data Stream Loading](#)
- [Delimited Parser](#)
- [Unit of measure \(UOM\) Converter](#)
- [Integrator Processing](#)
- [Loading](#)
- [Validation](#)
- [Load/Reject](#)
- [Getting Started with the Integrator](#)

About the VCC Integrator

The VCC Integrator consists of a series of parsers that allow you to load data into your VCC database or extract data from the VCC database.

Before you can load any data into VCC or extract data from the database, you must use the Integrator to define the format of the data stream or the format for the output file in the case of data extraction. The file that describes your file format is called a control file. VCC supplies default template control files for all the types of data you can load. The Integrator allows you to modify these templates for your specific requirements. Only the Stream Extractor uses a template file; no other template files are currently in use. The appropriate control file is automatically loaded when you configure an Extractor.

Note: If a control file contains Kanji characters and you want to FTP the file to another system, you must FTP the file as ASCII only.

For each control file you create for each specific type of data load or data extract there are several screens that you must configure for each control file. They are:

- Common definitions — allows you to configure a file group, specify the location of completed files, and specify the specific character set you are using.
- Delimited definitions.

The delimited definitions include the following:

- Delimiter definition — allows you to specify the delimiter (such as a comma, a tab or some other delimiter) you use in your data stream files that separates the data stream elements in the file.
- Column definitions — allows you to specify the column in which specific data elements appears in your data stream or whether you want to define a specific data element as a global value.
- Global column definitions — allows you to define a global value for any element in your data stream. For example, your company ID may not occur in your actual data stream, but you can include it in the control file by specifying it as a global value. The global value is loaded as if it were included in the data file. At least one parameter must be column based.

VCC allows you to load the following types of data:

- Collaboration items, which are the items on which you intend to collaborate with a trading partner.
- Data streams, which is the data you intend to load into VCC.
- Aggregate Data are the disaggregation values you intend to apply to your data if required. In the case of measure streams, no disaggregation profile applies; otherwise, a disaggregation profile applies to movement and balance streams. For details about disaggregation, see the Oracle Retail VCC User Guide.
- Event Promotions, which are special promotions that are in effect for a limited time period. You also can enter event promotions using the VCC Client; however, if you have a large quantity of event promotions, it is more efficient to load them using the Integrator.
- Exception criteria, which are the rules you apply to your data to generate exceptions. You also can enter exception criteria using the VCC Client; however, if you have a large quantity of exception criteria, it is more efficient to load them using the Integrator.
- Exceptions, which are alerts generated by your exception criteria.
- Product profiles, which are your product's base price information.
- Metrics, which provides a way to configure and calculate business metrics such as inventory turns, variability, forecast error, etc.
- UOM conversion, which is a unit-of-measure conversion factor that allows you to standardize the units of measure in the data stream you intend to load into VCC using the UOM parser.
- Scheduler tasks, which allow you to schedule commands to be executed.

- Master data, which are the hierarchies (categories) and leaf folders you intend to use for your periods, products, partners, and locations. Use the Master Data Loader to load master data.
- Aggregate Definition Loader, which allows loading of Aggregate Definitions.

The VCC Integrator allows you to extract the following data from the VCC database:

- Blocked dates for the shipping calendar
- Collaboration items
- Collaboration Product Hierarchy
- Stream (leaf and aggregate)
- User
- Demand policy
- Exception Criteria
- Master data
- Price profiles
- Promotions
- Supply
- UOM conversion factors
- Metric Definitions
- Disaggregate Profiles
- Disaggregation Factors

About Data Stream Loading

A data stream goes through several stages before it is added to the VCC database. These stages include the following:

- Delimited parser, which allows you to define the data stream file format (see “Leaf Stream Loader”).
- UOM Converter, which allows you to convert units of measure to standard units of measure, if required (see “Stream Extractor”).
- Integrator processing (see “Running the VCC Integrator,”), including:
 - Integrator Loading
 - Integrator validation
 - Integrator load/reject

Delimited Parser

The Delimited parser performs the job of reading the input file from the Integrator data objects, which are then passed along to the UOM converter.

Several things can go wrong at this stage, including the following:

- If there is enough data to create a data object, the object is created but may be rejected if a record contains an invalid number or symbol in the quantity field.
- If there is not enough data to create an object, the error is logged to the file’s associated log file (in the archive directory) and the parse continues. For example, this can occur if the “Data Stream Typecode” is invalid or missing.

Unit of measure (UOM) Converter

The UOM converter allows you to convert data values you are loading to match the UOM for the product stored in the database.

After the UOM converter finishes, it hands the object along to the temporary file creation stage.

The following errors can occur during UOM conversion:

- If the incoming data is invalid because neither the creator company nor the partner company are local, the object is rejected.
- If the product exists in the system, and the UOM specified in the input file is not valid for this product, the object is rejected.
- If a UOM is specified in the input file and the product exists in the system, but does not have an associated UOM, the object is rejected. A product cannot be created without a unit of measure.

Integrator Processing

Loading

During loading the loader takes the file created in the previous stage, and loads it to the database's staging table.

If the load fails for any reason, the debug files generated by sqlldr are moved to the archive directory and the output from sqlldr is placed in adaptor.log. This is usually caused by duplicate rows appearing in the input file.

Note: If the data files you are loading contain duplicate records, only the duplicate records across all files get rejected.

It is not possible to load the stream data in base units and in other UOM units from the same load if the context, stc, sitc, period and creation date are the same. Duplicate rows will trigger an error message and the duplicate rows will be rejected.

Validation

Validation calls a stored procedure in the database to validate all master data involved in this iteration of the load. If any of the master data does not exist, the missing elements will be placed in "not found" tables. The Integrator then queries the "not found" tables.

There should not be any rejects in this stage.

Load/Reject

The Integrator calls a stored procedure and all valid data streams are loaded. Data streams that cannot be loaded are placed in a reject table. The Integrator then queries the reject table, and from that data, generates the rest of the rejects.

Some of the main reasons for rejection are:

- Company not found
- Location not found
- Product not found and could not be reached
- Period not found

- Collaboration Item not found and could not be reached
- Invalid stream type code
- Invalid stream item type code

Getting Started with the Integrator

Before you begin to use the Integrator to import or export data, there are a few procedures you must perform

1. Configure the VCC Integrator selecting “VCC Configurations” from the VCC program group.
2. Configure the appropriate loader control file or extractor control file for the function you want to perform. Subsequent chapters describe how to configure the control files for each type of data.
3. Run the Integrator from the VCC program group to specify the control files you want to process.

Master Data Loading and Extraction

This section contains the following topics:

- [Introduction to Master Data](#)
- [File Format for Adding Master Data](#)
- [Delimiter Information](#)
- [Block Header Information](#)
- [Block Body Information](#)
- [Comments](#)
- [Adding Master Data](#)
- [Removing Location Folder Nodes](#)
- [Removing Location Leaf Nodes](#)
- [Renaming Master Data](#)
- [Updating Master Data](#)
- [Moving a Node Without the Move Command](#)
- [Configuring Master Data Hierarchy Extraction](#)
- [Synchronizing Hierarchies](#)
- [Configuring the Master Data Loader](#)

Introduction to Master Data

VCC allows you to create and manage your (local) master data by defining it in a flat file and processing the file in batch mode. You cannot create hierarchies for non-local companies.

There are four primary master data hierarchies:

- product hierarchies
- partner hierarchies
- location hierarchies

- period hierarchies

In addition, you can add users or copy users, add relationships among folders, remove folders, rename folders, move folders, and update leaf nodes

Each hierarchy, of course, contains leaf-node information. You have the option of creating and managing your master data hierarchies and the leaf nodes in each hierarchy using a flat file.

Most often master data is exported from an existing legacy system using a third-party tool that extracts the data from the legacy system and formats it in the required master data flat-file format for loading.

If you have an existing hierarchy, and want to update it with a newer hierarchy, you can use the **Sync_Hierarchy** tool to compare an old hierarchy with a new one. The **Sync_Hierarchy** tool produces a file containing only new items that you can load into the database. For details, see Synchronizing Hierarchies.

To run the hierarchy loader, create a control file using **VCC - VCC Configurations - VCC Configurations** ; load the control file using **VCC - Integrator**.

Note: To run the Master Data Loader, you must be the user called "integratoruser". The default password is "pinkrhino."

For details on running the VCC Integrator, see Running the VCC Integrator.

About Product Hierarchies

A product hierarchy contains product master data, which includes

- Product Name
- Global Item Number (GIN)
- Local Item Number (LIN)
- Unit of measure (UOM)
- common unit-of-measure (UOM) factor -- Consolidates many different units of measure (UOM) into a common, single unit of measure. Must be "0" if a common unit-of-measure factor is not provided. This unit-of-measure conversion factor is usually used to reduce a larger number to a smaller one; for example, to reduce cases to individual units (each). If a case has 12 units, the UOM conversion factor would be 12, and the forecast number is multiplied by 12.
- URL -- the URL to any link (optional). For example, it can be a URL to a product image or product information. Leave this field blank if you do not wish to specify a URL. For details on adding product leaf nodes, see Adding Product Leaf Nodes.

About Collaboration Product Hierarchies

All leaf collaboration products below the selected (extract) context can be extracted from a Collaboration Product Hierarchy.

About Partner Hierarchies and Location Hierarchies

A partner hierarchy and a location hierarchy contain partner and location master data, which includes:

- Partner name or location name
- Identifier (this is typically a DUNS + 4 number)

- Company ID (this is typically a DUNS number). About Partner Hierarchies and Location Hierarchies
- URL -- the URL to any link. For example, it can be a URL to a partner image or partner information. Leave this field blank if you do not wish to specify a URL.

About Period Hierarchies

A period hierarchy contains period master data, which includes:

- Period Name
- Begin Date
- End Date

For details on creating leaf period relationships to the folder, Adding a Period Relationship.

File Format for Adding Master Data

A master data flat file contains the following:

- A **delimiter definition**. This is the ASCII delimiter you intend to use to separate the items in the file. You can specify only one delimiter in a master data file.
- A **block** (or blocks), which contains a block header and the block body. If you are loading product hierarchy by the direct path method, only one header line is allowed per file. If you want to load master data for multiple companies, each company must have company data in a separate file.

The master data flat file can contain multiple blocks.

The format for a master data flat file is shown in the table below:

Table 5-1 Flat File Format

Line Number	Contains
Line 1 - Delimiter	The delimiter is the character you use to separate the items in the flat file. This is most usually a comma and it must be the first line in the file. You cannot specify two different delimiters for the same file. Note that no leading spaces or trailing spaces are allowed in the delimiter line.
Line 2 - Block 1 Header	The header line, which must begin with an "H" to designate it as the header line, defines the function you intend to perform; the company ID; and the master data type (product, partner, location, or period).
Line 3 to n - Block 1 Body	Node designation (leaf or folder), or relationship designation. Specify the type of node you intend to create by entering an "L" for leaf-node "F" for a folder node "R" for relationship Specify additional data on the line as required for the type of master data you are creating as defined in the header line.
Line $n+1$	New block header. Block body follows.

You can specify as many blocks in a single file as you need so you can perform multiple actions on your master data in one file. Remember, however, that a file can contain only one delimiter in the first line of the file.

All lines in the file can be terminated by either a linefeed (0x0A), or a carriage return linefeed combination (0x0D0A).

Example

In the example below, a new product category called "Cookies" is created.

```
,
H,A,MY_COMPANY_ID,PRO
F,COOKIES,COOKIES_X
```

Delimiter Information

The delimiter is the first line in the flat file, and you cannot specify any other characters in the delimiter line. You use the delimiter to separate the items in your flat file. You can specify only one delimiter per flat file.

Note: No leading spaces or trailing spaces are allowed in the delimiter area.

Block Header Information

Think of the header line as the command line in the file. It is where you specify the type of function you want to perform, the company on which the function is performed, and the master data type (product, location, partner, period, and users) to which the function applies. If you want to load master data for multiple companies, each company must have company data in a separate file.

Format your header line as specified in See Header Line Format. Separate each field using the delimiter you specified in the first line of the flat file. If an error is found in the header line, an error similar to the following is generated:

```
:<MDL> error: MDLException at
D:\IntegratorLoadTests\DataFiles\MDLdata\lenny\lenny_prod.txt(3):<MDL> :
errorcode=6016 Class "com.syncra.ct.integration.mdl.interpreter.verbs.
```

Table 5–2 Header Line Format

Column	Description
Header Designation	H - designates that this line is the header line.

Table 5–2 (Cont.) Header Line Format

Column	Description
Function	<p>One of the following:</p> <ul style="list-style-type: none"> • A - The block body pertaining to this header contains nodes or parent/child relationships to add.. • R - The block body pertaining to this header contains nodes or parent/child relationships to remove. • RC - The block body pertaining to this header contains parent and child nodes to remove (delete cascade). • RN - The block body pertaining to this header contains nodes to rename. You also can use the Update function to rename a node. • U - Update all attributes of a leaf node except the hierarchy ID or GIN. You can use the update function to rename a node but the Rename function is more appropriate. • MOVE - Move a folder node or leaf node.
Company ID	The company ID or "ALL_COMPANIES." "ALL COMPANIES " lets you remove leaf products from all companies in the hierarchy. Company ID can be a name or a number.
Master Data Type	<p>One of the following:</p> <p>PRO- The file contains product data.</p> <p>LOC - The file contains location data.</p> <p>PAR - The file contains partner data.</p> <p>PER - The file contains period data.</p> <p>USER - The file contains new users.</p>

To move a node or relationship, see "Moving a Node Without the Move Command".

Example:

The following is an example of a header to add a folder of prmpleproducts called "Snacks" (SNACKS_X is the unique identifier for the folder) to ACME's product hierarchy.

```

/
H,A,ACME01,PRO
F,SNACKS,SNACKS_X

```

Block Body Information

The block body contains the detail information required to execute the function you specify in the header. The first character of a block body line defines the type of master data you want to manage: a leaf node, a folder node, or a relationship between nodes.

The first character in a block body line can contain

- F -- indicates a folder node is to be created
- L -- indicates a leaf node is to be created
- R -- indicates a relationship is to be created

Comments

Include a comment in a master data hierarchy file by entering the pound (#) sign as the first character in the line.

Adding Master Data

This section describes how to add master data. It contains:

- [Adding Product Folder Nodes](#)
- [Adding Product Leaf Nodes](#)
- [Adding a Product Parent/Child Relationship](#)
- [Adding a Period Folder Node](#)
- [Adding a Period Relationship](#)
- [Adding a Partner Folder Node](#)
- [Adding a Partner Leaf Node](#)
- [Adding a Partner Relationship](#)
- [Adding a Location Folder Node](#)
- [Adding a Location Leaf Node](#)
- [Adding a Location Relationship](#)
- [Copying a User](#)

Adding Product Folder Nodes

A folder node is a category name that you use to contain leaf-level names. To add a folder node, specify the following after the header line:

Table 5–3 Adding Product Folder Nodes

Column	Description
F	Indicates this line represents a folder node.
Textual Description	The name of this folder node.
Identifier	A unique identifier for this folder node.

The following example adds the folder “COOKIES” to your hierarchy.

```

/
H,A,MY_COMPANY_ID,PRO
F,COOKIES,COOKIES_X

```

Adding Product Leaf Nodes

If you are loading a leaf node (product, partner, or period) using the master data loader without a parent-child relationship, the node is added to the root of the tree (see Example 2).

If you load leaf nodes without relationships, new leaves are added to the root node. If the leaf already exists in the system, no action is taken and it will not be linked to the root node.

If leaves are loaded with an explicit relationship with the root node as the parent, all nodes are added (or linked) to the root node. If any leaves previously existed in the system, a link to that leaf would be added to the root node.

Note: If you attempt to add leaves to a non-existent folder, the leaves are added to the recycle bin

The line for adding a leaf product node must contain:

Table 5–4 Adding Product Leaf Nodes

Column	Description
L	Denotes this line as representing a leaf node.
Textual Description	The name of this leaf node.
GIN	The GIN for this product. This is used as the identifier for this product.
Local Item Number	A proprietary unique identifier for this product.
Unit-of-Measure	How this product is to be measured. The value can be any character string agreed upon by the trading partners.
Common unit-of-measure factor	Common unit-of-measure (UOM) factor — Consolidates many different units of measure (UOM) into a common, single unit of measure. Must be “0” if a common unit of measure factor is not provided.
URL	URL — the URL to any link. For example, it can be a URL to a product image or product information. Leave this field blank if you do not wish to specify a URL as shown in example 3.
Load factor	A “rough-cut” transportation capacity estimate for this product. This is the number of units expected to be shipped per load for this product. You can leave the load factor field empty if there is no load factor.
GIN Type	Global Item Number Type. Leave this field blank if you do not wish to specify a value, and a default value will be loaded. For more information on defaults.
LIN Type	Local Item Number Type. Leave this field blank if you do not wish to specify a value, and a default value will be loaded. For more information on defaults.
Weight	Weight per unit (for Supply). Leave this field blank if you do not wish to specify a value, and a default value will be loaded. For more information on defaults.
Volume	Volume per unit (for Supply). Leave this field blank if you do not wish to specify a value, and a default value will be loaded. For more information on defaults.

Example 1:

This example adds the product “Chips” and then adds chips to the product category “Snacks.” For details on the format for creating a parent/child relationship such as Chips and Snacks, see Adding a Product Parent/Child Relationship.

,
H,A,11111111,PRO

L,Chips,011789037495,011789037495,EA,0,http://myco.com/chips.html,0.9
 R,SNACKS_X,L,011789037495

Example 2:

This example adds the new product “Chips” under the root node and not to any specific category. Note that the relationship to the root node is not necessary.

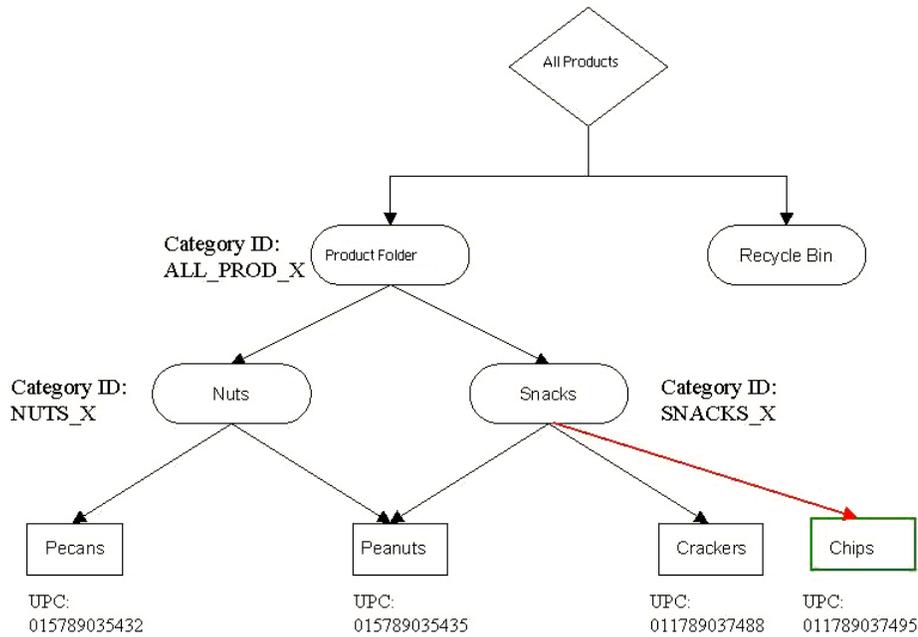
,
 H,A,11111111,PRO
 L,Chips,011789037495,011789037495,EA,0,http://myco.com/chips.html,0.9

Example 3:

This example does not include a URL, and the field is left blank.

,
 H,A,11111111,PRO
 L,Chips,011789037495,011789037495,EA,0,,0.9

Adding a Node to a parent



Example:

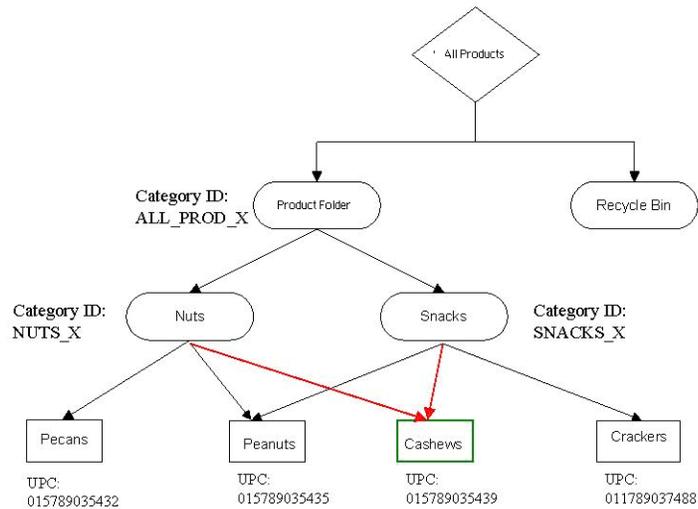
This example illustrates how to add a product node to two parent nodes. It adds the product Cashews with the GIN 015789035439 to two parent nodes: “Nuts” and “Snacks.”

,
 H,A,11111111,PRO
 L,Cashews,015789035439,015789035439,EA,0.26,,0.9

R,SNACKS_X,L,015789035439

R,NUTS_X,L,015789035439

Add a Node to Multiple Parents



Example:

This example adds a node and its contents. In this example, the following is accomplished:

- Beverages is created
- Milkshake is created
- OJ is created
- Beverages is added to All Products
- Milkshake is added to Beverages
- Milkshake is added to Snacks
- OJ is added to Beverages

,

H,A,11111111,PRO

F,BEVERAGES,BEVERAGES_X

L,Milkshake,011789037440,011789037440,EA,0.25,,0.9

L,OJ,011789037441,011789037441,EA,0.6,http://myco.com/oj.html,0.9

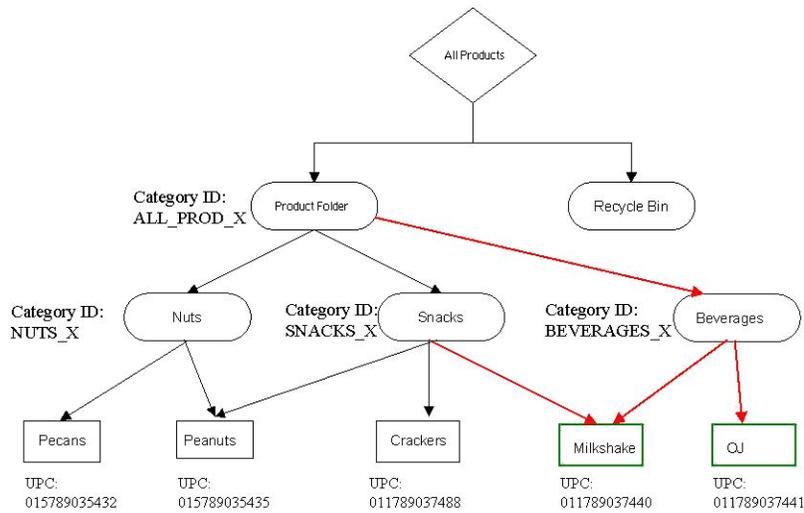
R,ALL_PROD_X,F,BEVERAGES_X

R,BEVERAGES_X,L,011789037440

R,SNACKS_X,L,011789037440

R,BEVERAGES_X,L,011789037441

Add a Folder Node and Contents



Adding a Product Parent/Child Relationship

The line for adding a parent/child relationship must contain:

Table 5-5 Adding a Product Parent/Child Relationship

Column	Description
R	Identifies this line as a parent/child relationship.
Parent Id	The unique identifier for the parent node. This must be a non-leaf node that already exists or is created earlier in this file.
L or F	L specifies that the child is a leaf node. F specifies that the child is a folder node.
Child Id	The unique identifier for the child node. This must be a node that already exists or is created earlier in this file.

Example 1:

This example illustrates how to create a parent/child relationship. In this example, Pecans with the GIN 015789035432 is added to Snacks at company ID 111111111.

```

/
H,A,111111111,PRO
R,SNACKS_X,L,015789035432
    
```

Example 2:

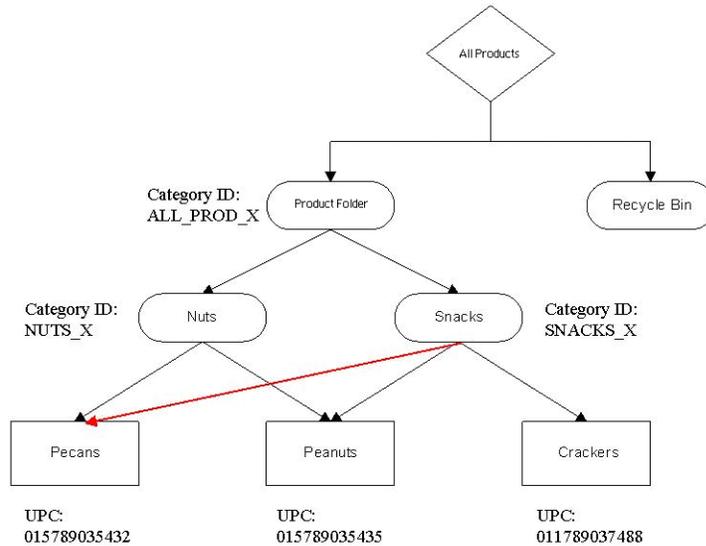
This example illustrates how to create a parent/child relationship with an existing product to a root node. In this example, the existing product Pecans with the GIN

015789035432 is added to the root node at company ID 11111111. Note that no category is specified.

```

/
H,A,11111111,PRO
R,,L,015789035432
    
```

Add a Parent/Child Relationship



Adding a Period Folder Node

If you are loading a leaf node (product, partner or location) using the master data loader without a parent-child relationship, the node is added to the root of the tree.

If you load leaf nodes without relationships, new leaves are added to the root node. If the leaf already exists in the system, no action is taken, and it will not be linked to the root node.

If leaves are loaded with an explicit relationship with the root node as the parent, all nodes are added (or linked) to the root node. If any leaves previously existed in the system, a link to that leaf would be added to the root node.

The line for adding a period folder node must contain the following:

Table 5–6 Adding a Period Folder Node

Column	Description
F	Denotes this line as representing a leaf node.
Name	The period folder name.
Identifier	The period identifier.

Note that the unique identifier for a period node is the end date appended to the begin date, separated by a hyphen. It will be of the form *yyyy-mm-dd-yyyy-mm-dd*. The identifier is used for removing periods, and creating or removing parent/child relationships.

Adding a Period Relationship

The line for adding a parent/child period relationship must contain:

Table 5–7 Adding a Period Relationship

Column	Description
R	Identifies this line as a parent/child relationship.
Parent Id	The unique identifier for the parent node. This must be a non-leaf node that already exists or is created earlier in this file.
L or F	L specifies that the child is a leaf node. F specifies that the child is a folder node.
Child Id	The unique identifier for the child node. This must be a node that already exists or is created earlier in this file.

Example:

In this example, the folder is created, and the leaf relationship is added to the folder.

```

/
H,A,40-444-4444,PER
F,sample folder name, folder_id
R, folder_id, L, 2001-01-01-2001-01-07

```

Adding a Partner Folder Node

A folder node is a category name that you use to contain leaf-level names. To add a folder node, specify the following after the header line:

Table 5–8 Adding a Partner Folder Node

Column	Description
F	Indicates this line represents a folder node.
Textual Description	The name of this folder node.
Identifier	A unique identifier for this folder node.

Adding a Partner Leaf Node

If you are loading a leaf node (product, partner, or period) using the master data loader without a parent-child relationship, the node is added to the root of the tree (see Example 2).

If you load leaf nodes without relationships, new leaves are added to the root node. If the leaf already exists in the system, no action is taken and it will not be linked to the root node.

If leaves are loaded with an explicit relationship with the root node as the parent, all nodes are added (or linked) to the root node. If any leaves previously existed in the system, a link to that leaf would be added to the root node.

The line for adding a leaf partner node must contain:

Table 5–9 Adding a Partner Leaf Node

Column	Description
L	Denotes this line as representing a leaf node.
Name	The name of this leaf node.
Identifier	The identifier for this partner. This is used as the identifier for this partner.
Company ID	A proprietary unique identifier for this partner.
URL	URL — the URL to any link. Leave this field blank if you do not wish to specify a URL.
Global Location ID Type	If you leave this field empty, the default type value will be loaded.
Alternate Location ID	If you leave this field empty, the Global Location ID value will be loaded.
Alternate Location ID Type	If you leave this field empty, the Global Location ID Type value will be loaded.

Adding a Partner Relationship

The line for adding a parent/child relationship for a partner must contain:

Table 5–10 Adding a Partner Relationship

Column	Description
R	Identifies this line as a parent/child relationship.
Parent Id	The unique identifier for the parent node. This must be a non-leaf node that already exists or is created earlier in this file.
L or F	L specifies that the child is a leaf node. F specifies that the child is a folder node.
Child Id	The unique identifier for the child node. This must be a node that already exists or is created earlier in this file.

Adding a Location Folder Node

A location folder node is a category name that you use to contain leaf-level location names. To add a folder node, specify the following after the header line:

Table 5–11 Adding a Location Folder Node

Column	Description
F	Indicates this line represents a folder node.
Textual Description	The name of this folder node.
Identifier	A unique identifier for this folder node.

The following example adds the folder “**newlocationfolder1**” to your hierarchy.

```

/
H,A,11111,LOC
F,newlocation folder1,newlocationfodler1

```

Adding a Location Leaf Node

To add a location you must first create a location folder if it does not already exist, and then associate the new location to the folder in which you want it to belong.

The line for adding a location node must contain:

Table 5–12 Adding a Location Leaf Node

Column	Description
L	Denotes this line as representing a leaf node.
Location Name	The name of the location node.
Location Identifier	The identifier for this location.
Company ID	A proprietary unique identifier for this company.
URL	URL — the URL to any link. (Optional). Leave this field blank if you do not wish to specify a URL.
Global Location ID Type	If you leave this field empty, the default type value will be loaded.
Alternate Location ID	If you leave this field empty, the Global Location ID value will be loaded.
Alternate Location ID Type	If you leave this field empty, the Global Location ID Type value will be loaded.

Example:

```

,
H,A,11111,Loc
F, newloc folder1,newloc_fldr1
L, new location at 1,11111-0001,11111,http://net.com
L, new location at 2,11111-0002,11111,,
L, new location at 3,11111-0003,11111,,
L, new location at 4,11111-0004,11111,,
L, new location at 5,11111-0005,11111,,
R,newloc_fldr1,L,11111-0001
R,newloc_fldr1,L,11111-0002
R,newloc_fldr1,L,11111-0003
R,newloc_fldr1,L,11111-0004
R,newloc_fldr1,L,11111-0005

```

Adding a Location Relationship

The line for adding a parent/child relationship for a location is the same as adding a partner relationship. It must contain:

Table 5–13 Adding a Location Relationship

Column	Description
R	Identifies this line as a parent/child relationship.

Table 5–13 (Cont.) Adding a Location Relationship

Column	Description
Parent Id	The unique identifier for the parent node. This must be a non-leaf node that already exists or is created earlier in this file.
L or F	L specifies that the child is a leaf node. F specifies that the child is a folder node.
Child Id	The unique identifier for the child node. This must be a node that already exists or is created earlier in this file.

Adding a User

The line for adding a user must contain:

Table 5–14 Adding a User

Column	Description
L	Designates a node to add. "L" designates a leaf node.
User Name	The new user name.
Password	The new user password.
Role	superadmin, serveradmin, limitedadmin, admin, manager, supervisor, planner, reviewer
Login Allowed	1 = allowed; 0 = not allowed
e-mail	The user e-mail address (Optional).
en_US	language preferences (Optional)
user_type	regular user = 0; system user = 1
Real Name	Up to 40 characters.
Telephone Number	Up to 40 characters.
Fax Number	Up to 40 characters.

Examples

The following example adds a user, Smith, to the admin role for company 111111.

```
,
H,A,111111,USER
L,Smith,demo,admin,1,smith@acme.com,en_US,1,,
```

For loading a server admin role user, do not use a Company ID. The header record must be "All_Companies", as seen in the example below:

```
,
H,A,All_Companies,USER
L,satserveradmin1,demo,-8,1,email,en_us,0,,,
L,satserveradmin2,demo,server_admin,1,email,en_us,0,,,
```

Copying a User

The create user feature allows you to create a new user and assign the user to a specific role for the company specified in the file block header. If the user already exists, you will get the error message.

00-05-03-00 Duplicate user name for role in company. Please enter another user name.

To add a user, the block line must contain:

Table 5–15 Copying a User

Column	Description
L	Designates a node to add. "L" designates a leaf node.
Old User Name	The old user name.
New User Name	The new user name.
New password	The new user password.
E-Mail Address	Up to 40 characters.

To copy a user

,

H,CP,10-124-1017,USER

L,OldUserName,NewUserName,NewPassword,NewEmail

Removing Location Folder Nodes

The line for removing a location folder node must contain:

Column	Description
F	Designates a folder node to remove.
Identifier	This is the unique identifier for this node.

Removing Location Leaf Nodes

The format for removing a partner leaf node or location leaf node must contain the following:

Column	Description
L	Designates this as a leaf node to remove.
Location Identifier	This is the unique identifier used for this location.
Company Identifier	This is the unique identifier for the company that owns this location.

Example:

,

H,R,11111,Loc

L, 11111-0001,11111

Renaming Master Data

You can rename product folder nodes and product leaf nodes, period folders, partner folder nodes and partner leaf nodes.

This section contains the following topics:

- [Renaming Product Folder Nodes and Product Leaf Nodes](#)
- [Renaming Period Folders](#)

- [Renaming Partner Folder Nodes and Partner Leaf Nodes](#)
- [Renaming Location Folder Nodes and Location Leaf Nodes](#)

Renaming Product Folder Nodes and Product Leaf Nodes

The line for renaming a node must contain the following:

Column	Description
F or L	Designates a node to rename. "F" designates a folder node; "L" designates a leaf node.
New Name	This is the new name.
Identifier	This is the node identifier.

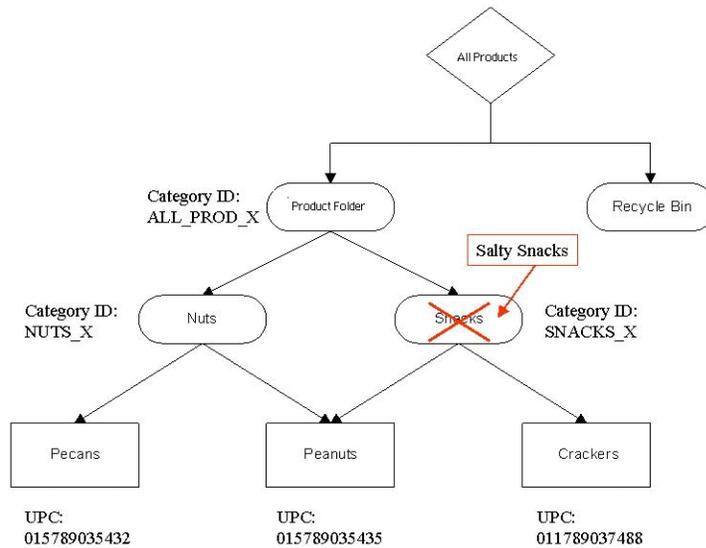
Note: You cannot rename leaf periods.

Example

This example renames a node. In this example, "Snacks" is renamed to "Salty Snacks."

,
H,RN,11111111,PRO
F,Salty Snacks,SNACKS_X

Renaming a Node



Renaming Period Folders

The line for renaming a node must contain the following:

Column	Description
F or L	Designates a node to rename. "F" designates a folder node; "L" designates a leaf node.
New Name	This is the new name.
Identifier	This is the node identifier.

Note: You cannot rename leaf nodes.

Renaming Partner Folder Nodes and Partner Leaf Nodes

The line for renaming a node must contain the following:

Column	Description
F or L	Designates a node to rename. "F" designates a folder node; "L" designates a leaf node.
New Name	This is the new name.
Identifier	This is the node identifier.

H,RN,11111111,PAR

L,BIG_MART_BOSTON,BIG_MART_BOSTON_X

Renaming Location Folder Nodes and Location Leaf Nodes

The line for renaming a location node must contain the following:

Column	Description
F or L	Designates a node to rename. "F" designates a folder node; "L" designates a leaf node.
New Name	This is the new name.
Identifier	This is the node identifier.

Updating Master Data

This section contains the following topics:

- [Updating Product Leaf Node](#)
- [Updating a Partner Leaf Node](#)

Updating Product Leaf Node

You can update all attributes of a leaf node except the GIN, which is the key for the leaf.

The line to update a product leaf node may contain:

Column	Description
L	Denotes this line as representing a leaf node.
Name	The name of this leaf node.

Column	Description
GIN	The GIN for this product. This is used as the identifier for this product.
Local Item Number	A proprietary unique identifier for this product.
Unit-of-Measure	How this product is to be measured. The value can be any character string agreed upon by the trading partners.
Common unit-of-measure stat factor	Common unit-of-measure (UOM) stat factor — Consolidates many different units of measure (UOM) into a common, single unit of measure. Must be "0" if a common unit of measure factor is not provided.
URL	URL — the URL to any link. For example, it can be a URL to a product image or product information.
Load factor	A "rough-cut" transportation capacity estimate for this product. This is the number of units expected to be shipped per load for this product. You can leave the load factor field empty if there is no load factor. This must be the last function specified.
GIN Type	Global Item Number. Leave this field blank if you do not wish to specify a value, and a default value will be loaded.
LIN Type	Local Item Number Type. Leave this field blank if you do not wish to specify a value, and a default value will be loaded.
Weight	Weight per unit (for Supply). Leave this field blank if you do not wish to specify a value, and a default value will be loaded.
Volume	Volume per unit (for Supply). Leave this field blank if you do not wish to specify a value, and a default value will be loaded.

Example:

The following example provides an update for a product with the GIN 102003000. The GIN is a key and cannot be updated.

,

H,U,10-127-1024,PRO

L,Product1,102003000,NAB102003000,EA,0.5,,

Updating a Partner Leaf Node

The line to update a partner leaf node may contain:

Column	Description
L	Denotes this line as representing a leaf node.
Name	The name of this leaf node.
Identifier	The partner company identifier.
Local Item Number	A proprietary unique identifier for this product.
Company ID	The partner company ID.
URL	URL — the URL to any link. For example, it can be a URL to a product image or product information.
Global Company ID Type	If you leave this field empty, the default type value will be loaded.
Alternate Company ID	If you leave this field empty, the default value will be loaded.

Column	Description
Alternate Company ID Type	If you leave this field empty, the default type value will be loaded.

Moving a Node Without the Move Command

To move a node you have to create a file with two headers. One header and its associated lines adds the relationship to the appropriate location, the second header and its associated lines removes the old relationship. Note that you must add the new node before you remove the old one.

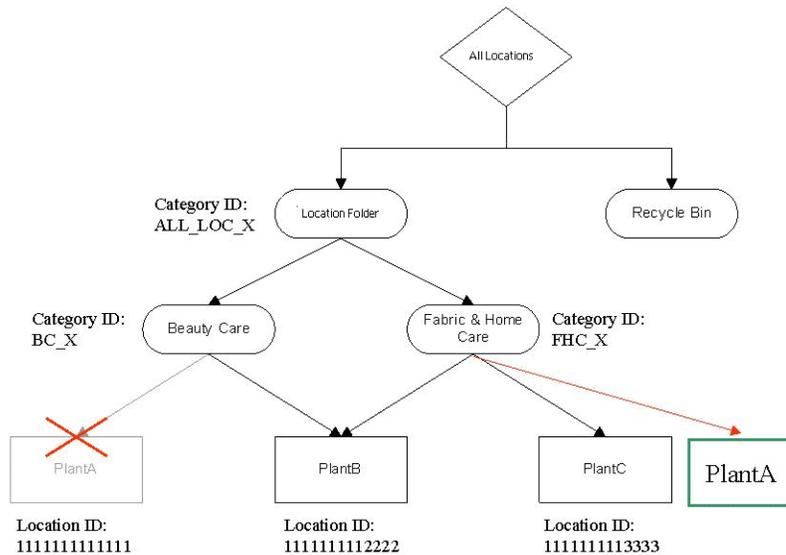
Example:

This example moves a location from one category to another. In this example, "Plant" is removed from "Beauty Care" and moved (added) to "Fabric and Home Care."

```

/
H,A,11111111,LOC
R,FHC_X,L,11111111111
H,R,11111111,LOC
R,BC_X,L,11111111111
    
```

Moving a Node



Moving a Folder or Leaf with the Move Command

The line to move a leaf node must contain:

Column	Description
L, PRO, LOC, PAR, PER	Denotes this line as representing a leaf (L), product (PRO), location (LOC), partner (PAR), or period (PER) node.
Source Folder ID	The local ID of the folder from which the leaf is to be moved. Entering “,” indicates the root node.
Destination Folder ID	The local ID of the folder to which the leaf is to be moved.
GIN, DUNS+4, Begin-Date - End Date	A proprietary unique identifier for this item. GIN for product, DUNS+4 for location or partner, or begin date - end date for periods.

The line to move a folder node must contain:

Column	Description
F	Denotes this line as representing a folder node.
Source Folder ID	The local ID of the folder from which the folder is to be moved. Entering “,” indicates the root node
Destination Folder ID	The local ID of the folder to which the folder is to be moved.
childlocal folderID	A local folder ID that is to be moved.

Sample Leaf Move

In this example, the period leaf node moved from the root node to the period folder.

```

,
H,MOVE,10-124-1107,PER
L,,period_fldr1,2001-12-31-2001-12-31
L,,period_fldr1,2002-01-01-2002-01-01
L,,period_fldr2,2002-01-02-2002-01-02
L,,period_fldr2,2002-01-03-2002-01-03
L,,period_fldr2,2002-01-04-2002-01-04
L,,period_fldr2,2002-01-05-2002-01-05
L,,period_fldr2,2002-01-06-2002-01-06

```

Sample Folder Move

In this example, the folder local ID “Fldr12” is moved to the root node of the period hierarchy.

```

,
H,MOVE,9999,PER
F,-89,,Fldr12

```

Sample Leaf Period Move to Folders

In the following example, a folder for the year 2002 is added along with folders called Half1, Qtr1, and Jan 2002. Relationships for Half1, Qtr1, and Jan 2002 are established with the folder 2002. Leaf nodes are then moved from the root node into the Jan 2002 folder.

```

,
# Header Designation, Function, Company ID, MD Type
H, A,111,PER
# Folder, Year Folder Name, Folder ID
F, FY 2002, FY_2002
F, Half1 2002, Half1_2002
F, Qtr1 2002, Qtr1_2002
F, Jan 2002, Jan_2002
# Relate, Parent ID, F or L, Child ID
R,FY_2002,F,Half1_2002
R, Half1_2002, F, Qtr1_2002
R, Qtr1_2002, F, Jan_2002
# MOVING LEAF PERIOD FROM ROOT NODE TO Jan_2002 FOLDER
H,MOVE,111,PER
L,,Jan_2002, 2001-12-31-2002-01-06
L,,Jan_2002, 2002-01-07-2002-01-13
L,,Jan_2002, 2002-01-14-2002-01-20
L,,Jan_2002, 2002-01-21-2002-01-27

```

Sample Move for Leaves and folders

```

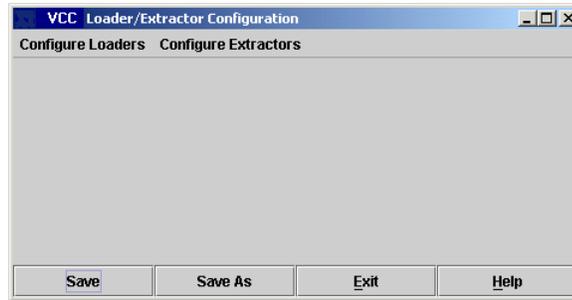
H,MOVE,111,PRO
#F,srcLocalFolderID,dstLocalFolderID,childLocalFolderID
L,prod_fldr2,prod_fldr1,0003
F,-2,,prod_fldr2
H,MOVE,111,LOC
L,loc_fldr2,loc_fldr1,111-003
F,-2,,loc_fldr2
H,MOVE,111,PAR
F,-2,,partloc_fldr2
L,partloc_fldr2,partloc_fldr1,222-003
H,MOVE,111,PER
L,Dec_2002,Nov_2002,2002-11-25-2002-12-01

```

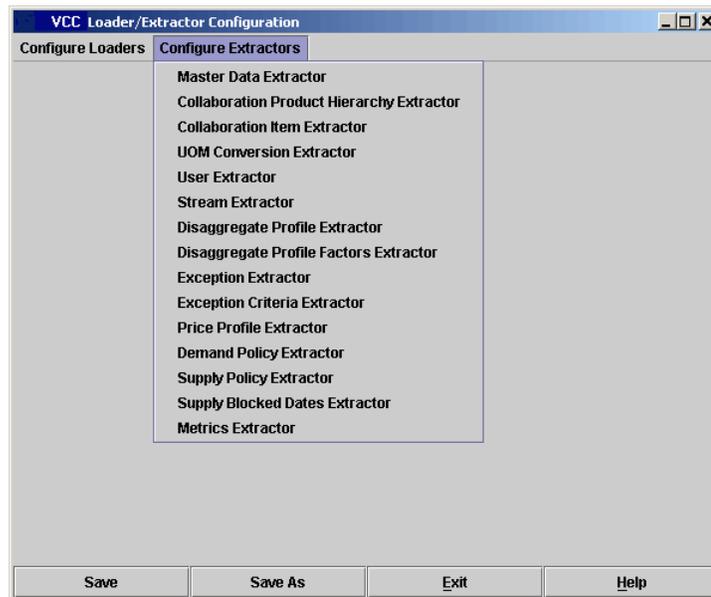
Configuring Master Data Hierarchy Extraction

To extract hierarchy data from your database

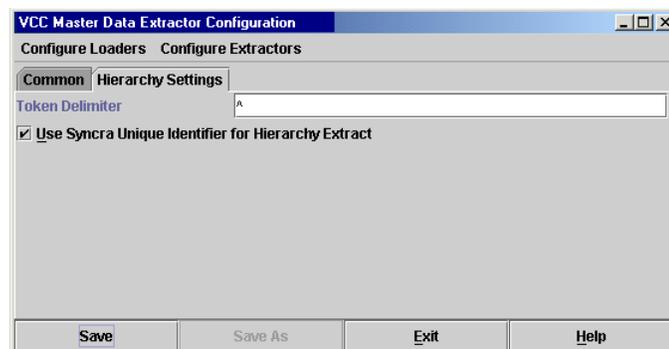
1. Select VCC - VCC Configurations - VCC Loader Extractor Configuration from the VCC program group. The Control File Configurations screen appears.



2. Click **Configure Extractors**. The drop-down menu of available data extractors appears.



3. Click **Master Data Extractor**. The **Hierarchy Setting** tab view appears.
4. In the Hierarchy Settings pane, enter the token delimiter you want to use to separate the data in the file once it is extracted in the **Token Delimiter** field.



5. Folders in a master data hierarchy have unique identifiers. Ordinarily, these unique identifiers are of no concern to the user. However, if you load a master data hierarchy that has been extracted from another system (legacy system or a VCC System), the folders are assigned two identifiers: the original identifier which was loaded through the hierarchy loader and a unique identifier that is assigned by

VCC. If you make changes to the loaded master data hierarchy, you will not be able to extract the master data unless you extract it using the VCC unique identifiers. To extract a hierarchy using VCC unique identifiers, check the **use VCC Unique Identifiers for Hierarchy Extract** check box. Do not check this check box if you want to extract hierarchy data with Local IDs.

6. Click **Save**.

To extract a master data hierarchy:

1. Ensure that you configured Extract Directory path during VCC configuration. For details see the Oracle Retail VCC Installation Guide.
2. Schedule the Hierarchy Extract event using the VCC Scheduler. At the time you specify, the master data hierarchy in your VCC database is extracted to the data retrieval directory.

Synchronizing Hierarchies

The **Sync_Hierarchy** tool allows you to update an existing hierarchy with a new one by comparing the two hierarchies and generating a file containing only new hierarchy items that you can use as input to the master data loader to update the existing tree.

- Any new input files must use the same delimiter as the old file. This must match the delimiter used in the *SyncHierarchy.properties* file.

To use the **Sync_Hierarchy** tool:

1. Edit the **SyncHierarchy.properties** file located in [SYNCRA_HOME]\Integrator

For details, see Editing a Hierarchy Synchronization Configuration File.

1. Run **Sync_Hierarchy**, which produces a files called **hierarchyDiff.txt**.
2. Load **hierarchyDiff.txt**.

After running, for any errors check the **Sync_Hierarchy_Launch_Log** file.

Editing a Hierarchy Synchronization Configuration File

The **SyncHierarchy.properties** configuration file for the **Sync_Hierarchy** tool must contain the following fields. Be sure to edit the **oldhierarchyfile** statement and the **newhierarchyfile** statement and the delimiter as per input files. The **oldhierarchyfile** is the existing master data file, and the **newhierarchyfile** is the modified master data file. These files must be located in the same directory as the **Sync_Hierarchy** tool. Do not include the full pathname for these files. Enter the file name only.

The fields configured in the **SyncHierarchy.properties** configuration file are shown below. The database parameters are set by the VCC configuration program.

oldhierarchyfile = **old_hierarchy_file_name**

newhierarchyfile = **new_hierarchy_file_name**

delimiter= **file_delimiter**

Example:

oldhierarchyfile = HIER_STAGING_OLD.txt

newhierarchyfile = HIER_STAGING_NEW.txt

delimiter = ,

Running the Synch_Hierarchy Tool

To run the Sync_Hierarchy tool, execute

[SYNCRA_HOME]\bin\Sync_Hierarchy.exe

After running, for any errors check the **Sync_Hierarchy_Launch.log** file.

For Unix:

[SYNCRA_HOME]/bin/Sync_Hierarchy

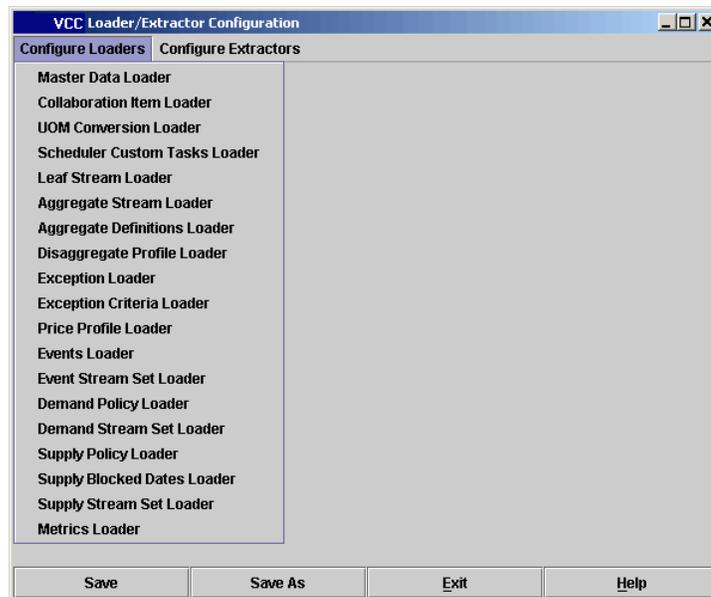
For any SQL Loader Error messages, please refer to the Oracle documentation. Copy and paste the URL below into your browser window:

http://download-west.oracle.com/docs/cd/B10501_01/server.920/a96525/ulus.htm#127525

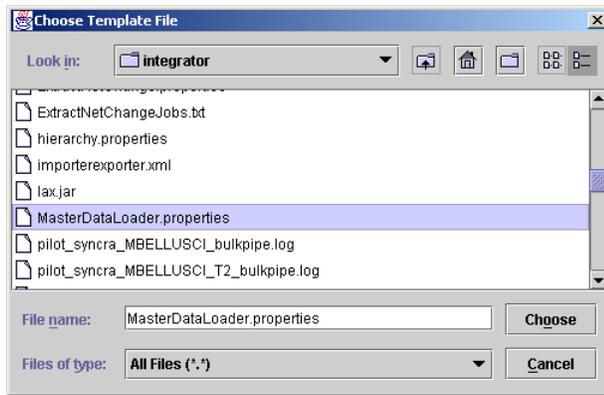
Configuring the Master Data Loader

To configure the Master Data Loader:

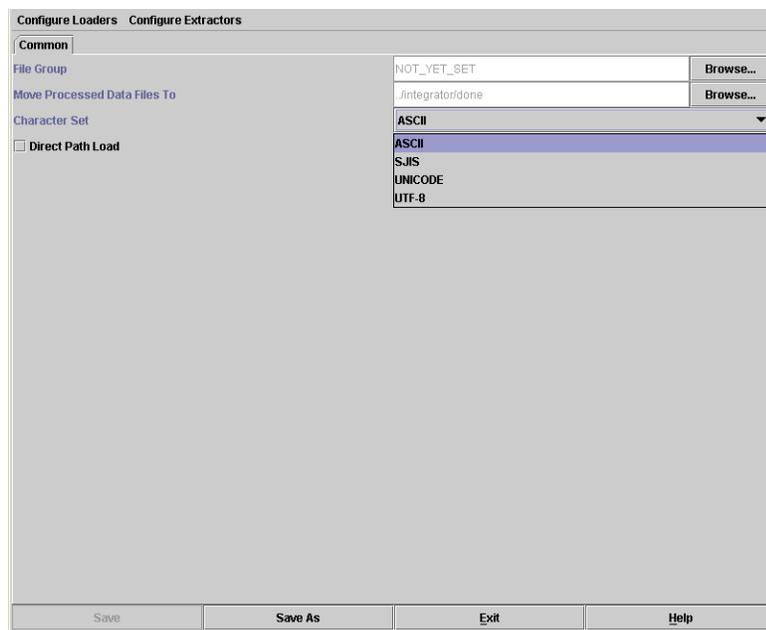
1. Select **VCC - VCC Configurations - VCC Loader Extractor Configurations** from the VCC program group.
2. Click the **Configure Loaders** tab and select **Master Data Loader**.



3. From the **Choose Template File** screen, select **MasterDataLoader.template** file.



4. The **VCC Loader/Extractor Configuration** file screen for the Master Data Loader appears.



5. In the **File Group** field browse to the file group for collaboration items.

A file group is a collection of data files with similar names or file extensions that you can load easily. VCC automatically loads all files in a specified directory or all files beginning with the file name characters you specify. It behaves similarly to a wildcard function.

Here are some File Group examples:

Example 1:

c:\data\load

In this case, the Integrator will load all files in the **load** directory

Example 2:

c:\data\load\forecasts_

In this case, the Integrator will load all files in the **load** directory that begin with **forecasts_**

This is the equivalent of the wildcard `forecasts_*.*`

6. In the **Move Processed Data Files To** field, browse to the directory in which you want to store your completed files and loader log files.
7. Check the **Direct Path Load** check box to add data directly to the database. The VCC Master Data Loader allows you to add (or update) information directly to your database using the Direct Load feature. The Direct Load feature bypasses the VCC server and adds data directly to your database. The performance increase is dramatic. Currently, you can only use the Direct Load tool when adding data. In most instances, you would want to use it when initially populating your database with product data. Although direct load bypasses the VCC Server, the VCC Server must be running while doing a direct load.

This feature is currently limited to the product hierarchy. Master data cannot be removed using this feature.

It is not necessary that the VCC Master Data Loader run on the same machine as the database or the same server.

Once a direct load is performed, in order to see the loaded trees in the Client, you must stop and restart the VCC Server.

8. Click **Save** to save the file or click **Save As** to give the file a name other than **MasterDataLoader.template**.

If you open the saved properties file, it resembles the following:

```
#Mon Sep 10 11:40:37 EDT 2001
```

```
integration.archive.directory=../integrator/done
```

```
integration.masterdata.directpathloadonly=true
```

```
integration.parser.creationdateformat=yyyyMMddHHmmss
```

```
integration.parser.filegroup=C:\\Program\\Files\\Syncra\\integrator\\direct_
load.txt
```

```
integration.parserclassname=com.syncra.ct.integration.parser.mdl.MasterDataLoader
```

Note that the second line in the property file indicates that the load is to be a direct load.

Running the VCC Integrator

This section contains the following topics:

- [VCC Integrator Prerequisites](#)
- [Running the VCC Integrator](#)
- [Restarting the Integrator](#)

VCC Integrator Prerequisites

Before running the VCC Integrator, ensure that Oracle is installed on the machine running the Integrator:

If, for some reason, you stop the Integrator process before it completes, check to see if the SQL process spawned by the Integrator exists. If so, stop it.

Also, ensure that you have configured a specified user name and password for the VCC Integrator. The user must have previously been created with admin privileges.

Note: To run the Master Data Loader, you must be the user called "integratoruser". The default password is "pinkrhino."

If the VCC Integrator fails to run because there are database settings missing, you will get an error message similar to the following in the Integrator log file:

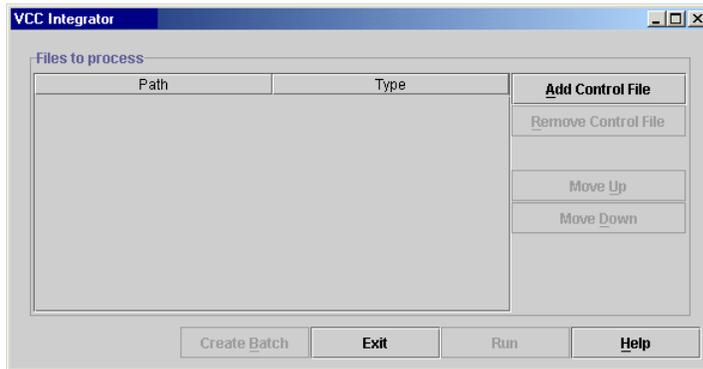
```
-----
---java.library.path=.lib
(Logger)(setLogFileName)Setting log file to output/Adapter.html
(Logger)(setLogFileName)Log file is HTML file.
8/31/01 12:56 PM:(Adapter)(parseArgs) logfile, output/Adapter.html, <p>
8/31/01 12:56 PM:Synkra Integration Adapter Copyright (c) 1999-2001 Synkra Systems, Inc. All Rights Reserved.
<p>
8/31/01 12:56 PM:(Adapter)(Constructor) User(mbellusc):JdbcDriver(oracle.jdbc.driver.OracleDriver):JdbcUrl(jdbc:oracle:thin:@ccc:1521:syncra):Server(ccc)<p>
8/31/01 12:56 PM:errorCode=0-10-184-328 message: Error initializing Database StatementManager details: Exception initializing StatementManager (Io exception: The Netw
```

Running the VCC Integrator

Note that if there is a syntax problem at any line in the data file, the file is rejected from that line onward.

To run the VCC Integrator:

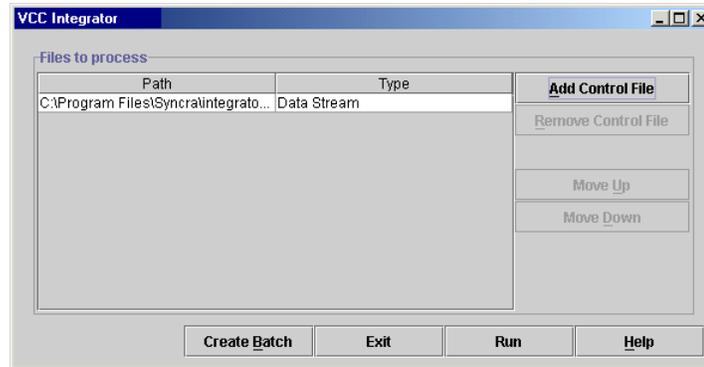
1. Select VCC Integrator from the VCC program group.



Click Add Control File. The Add Control File screen appears.

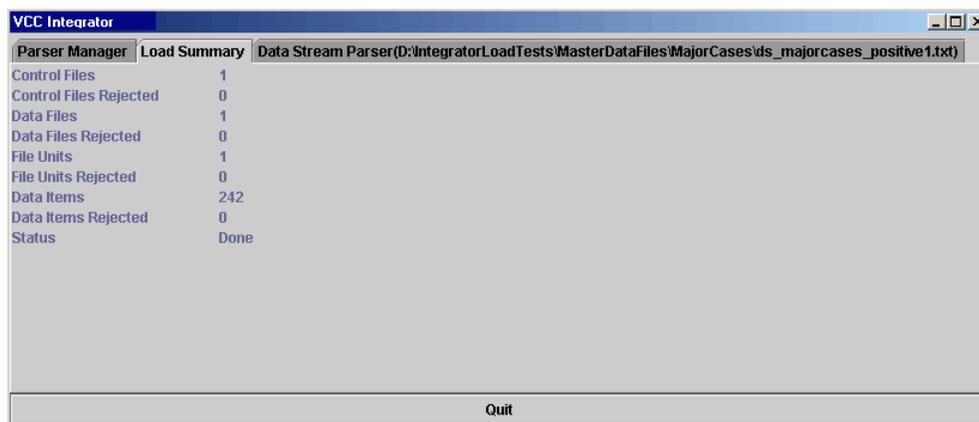


2. Browse to the appropriate control file. Click Add. You can add multiple control files by adding each singly to the list.



3. To save this configuration as a batch file, click **Create Batch**. This allows you to create a batch file (*.bat*) that you can execute at any time. If you do not want to create a batch file, proceed to step 5. When naming a batch file, do not use non-alphanumeric (special characters) in the file name.
4. Click **Run** to execute your selections if you did not create a batch file. The **Integrator Monitorpanel** appears detailing the progress and results of the Integrator.

You know the Integrator has finished processing when the **Quit** button becomes enabled. To check the status of the load, log in to VCC, navigate to Monitor - Jobs (all VCC jobs are listed). If your loader job contained only one control file or multiple control files for the same loader type, see a listing for your loader type (for example, "In - Load Stream Data"). If your loader job contained several control files for various loader types, see the listing "In - Multiple Load." For details, See Troubleshooting Integrator Data Loading.



Restarting the Integrator

If, for some reason, the Integrator is stopped or hangs while processing, perform the following steps and restart it.

1. As superuser, log in to VCC client.
2. Clear the server locks by selecting Monitor from the Left menu and select the Server Locks tab
3. Clear any outstanding load locks.

Integrator Validation Rules

This section contains the validation rules used to validate Integrator parsers.

Validation Rules

Data Type	Creator Company	Creator Location	Partner Company	Partner Location	Product	Period
Event	+	++	+	++	++	+
Data Stream	+	++	+	++	++	+
Product Profile	+	++	+	++	++	+
Exception	+	+	+	+	+	+
Exception Criteria	+	+	+	+	+	+
Scorecard	+	+	+	+	+	+
(Dis)Aggregates	+	+	+	+	+	+

Note that all parsers that require the planner role validate for that role.

Legend:

+ = Value is evaluated as part of an existing Collaboration item.

++ = Value is evaluated to see if it already exists.

Transactional Data Validation Rules

Data Type	Local Location	Partner Location	Product	Period
Event	L	L	L	L/A
Data Stream	L	L	L	L
Product Profile	L	L	L	L/A
Exception	L/A	L/A	L/A	L/A
Exception Criteria	L/A	L/A	L/A	L/A
Scorecard	L	L	L	L
(Dis)Aggregates	L/A*	L/A*	L/A*	L/A*

Legend:

L=Leaf

A=Aggregate

*=One dimension must be an aggregate

Integrator Loader Locks

This section contains the following topics:

- [About Locks and Jobs](#)
- [Loader Jobs](#)
- [Extractor Jobs](#)

About Locks and Jobs

Jobs and Locks are divided into categories that are integral to understanding the tables that follow.

Job Types

Each job falls into one or more of the following categories:

1. Reads hierarchy -- takes a snapshot of current hierarchy before continuing processing
2. Reads data stream -- reads information included as of the time processing begins
3. Updates data stream -- configures # of retries
4. Updates hierarchy -- updates the hierarchy
5. Extracts data -- extracts data from VCC database
6. Other -- may read or write to other tables

Lock Types

Each job can activate one or more of the 3 types of lock:

- Company-Self Lock (CSL) -- User and Scheduler jobs. This will block the same job for the same company. Example:

While Scheduler event processing 'Company - Recalled Metrics' is active, another attempt to run same task for the same company is blocked.

- Integrator-Self Lock (ISL) -- Integrator Load jobs. This will block the same job for the same Loader type.
- Database STC Lock (DSL) -- Database Stream Type Code Locks operate based on load volume.

About Load Volume

Load size is determined by the number of rows you are loading.

A load is considered low volume if the number of rows loaded is less than or equal to 50,000.

A load is considered high volume if the number of rows loaded for a stream type code is greater than 2 million, or if the load job is attempting to update more than 20% of the existing rows.

If the attempted load falls between the high and low mark, it is considered a medium load, which is treated the same as a low volume load.

Examples:

For low and medium volume loads

While a "Company - LocationA" updates STC17-SITC-1, "CompanyA - LocationsA" is blocked from updating STC17-1.

For high volume loads

While a "CompanyA - LocationA" updates STC17-SITC-1, all companies are blocked from updating STC17-123.

Loader Jobs**Table 5–16 Loader Jobs Table**

Job Screen Display	Job Type	Lock Type	Job/Lock Trigger Click "Run" button on Integrator Loader for selecting control file for.
Int - Load Aggregate Definitions	1, 2	Create Aggregates Lock	Aggregate Definitions
Int - Load Aggregate Stream	3	ISL, DSL	Aggregate Stream Data
Int - Load Collaboration Item	6	ISL	Collaboration Item
Int - Load Demand Policy	1	ISL	Demand Policy
Int - Load Demand Stream Set	1	ISL	Demand Stream Set
Int - Load Disagg. Profile	1	Create Aggregates lock	Disagg. Profile
Int - Load Events	3	ISL	Events
Int - Load Event Stream Set	6	None	Event Stream Set
Int - Load Exception Criteria	6	ISL	Exception Criteria
Int - Load Exceptions	6	ISL	Exception
Int - Load Leaf Stream	3	ISL, DSL	Leaf Stream Data
Int - Load Master Data	6	ISL	The desired Master Data files: Location Partners, Products, Periods, User's
Int - Load Metrics	1, 2, 3	ISL	Metrics
Int - Load Multiple	6	ISL	(When multiple control files for different loaders are included in the 'run'.)
Int - Load Price Profile	1, 3	ISL, DSL	(Price) Profile Stream Data
Int - Load Supply Blocked Dates	6	ISL	Supply Blocked Dates
Int - Load Supply Policy	6	ISL	Supply Policy
Int - Load Supply Stream Set	6	None	Supply Stream Set
Int - Load UOMs	6	None	UOM
Int - Local Custom Tasks	6	None	Custom Tasks

Extractor Jobs**Table 5-17** *Extractor Jobs Table*

Job Screen Display	Job Type	Lock Type	Job/Lock Trigger: Click "Run" button on Integrator - Extractor after selecting control file for...
Int - Extract All Stream Changes	5	5	All Stream Changes
Int - Extract Current Aggregate Stream	5	5	Current Aggregate Stream
Int - Extract Current Leaf Stream	5	5	Current Leaf Stream
Int - Extract Manual Stream Changes	5	5	Manual Stream Changes

Batch Processes

This chapter discusses about the scheduler and its interface. In addition, this chapter discusses adding and deleting scheduler events, and adding, editing, and deleting a task.

About the Scheduler

Oracle Retail VCC provides the Scheduler user interface to allow you to instruct the Scheduler Server to execute any predefined Oracle Retail VCC tasks and any Windows or Unix command you specify. These commands are called Tasks.

The Scheduler Server processes these commands at a designated execution time. Each task scheduled becomes an Event.

Only a superuser, serveradmin, and superadmin can access the scheduler. A superuser or Server Admin has the option to create an Event for either one company or all companies. A superadmin-created Event effects only superadmin companies.

You have the option to create/edit new Tasks/commands that the Scheduler retains for ongoing usage until deleted. Additionally, to facilitate basic processing needs, the Scheduler also includes a number of selectable preloaded Task commands. These preloaded tasks works in a Windows or Unix environment.

Tasks/commands initiate the execution of defined Processes. You have the option to specify an **Event** to execute a Task at one particular time or at designated time intervals.

Scheduler Log

The Scheduler log provides a view of the processed Events. This log shows the times the Processes were executed and if any problems occurred in scheduling or processing the Event. The Scheduler log is stored in the **bin** directory of your application server installation.

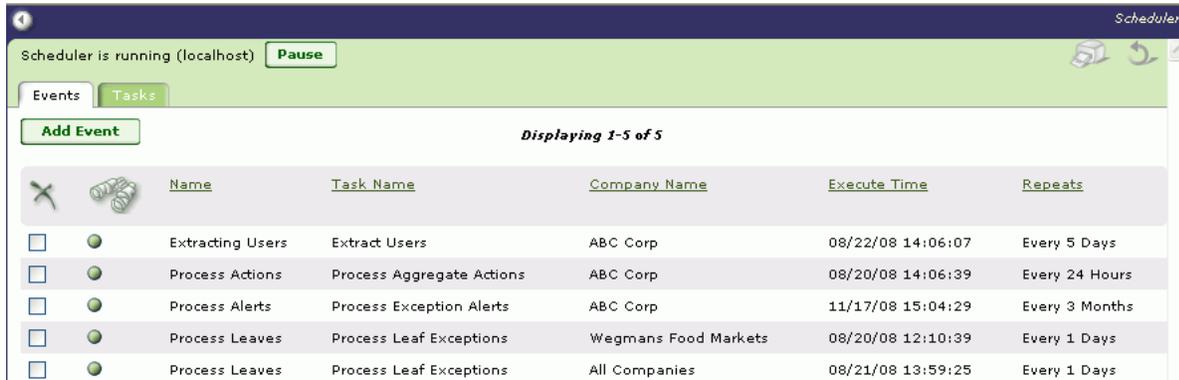
Working with the Scheduler Interface

The Scheduler allows you to schedule the execution of VCC predefined tasks. A scheduled task is called an **event**. The Scheduler also allows you to create and schedule any other valid system command.

Note: The Scheduler Server must be running before access is allowed from the user interface.

To access the Scheduler, click **Scheduler** from the VCC menu. The following screen comes up:

Figure 6–1 Scheduler



If the Scheduler is not running or if there is a problem with the configurations, a message informs you of this. These issues must be resolved before the **Scheduler** screen opens.

The interface provides these utilities:

- Pause and resume the Scheduler processing.
- Work with Tasks and Events.

Be aware of all event scheduling and task/command processing recommendations when working with the preloaded tasks.

The Scheduler List screens contain combinations of icons that allow you to:

- Refresh the screen to view updates.
- Access a printer-friendly view of the current list.
- Exports data as an HTML file or as a CSV file.

Working with Scheduler Events

Events List

Events allow you to schedule the execution of VCC predefined tasks or other tasks (system commands) that you have created.

Clicking the **Events** tab opens the **Events** window. All the existing Events are listed.

Figure 6–2 Events Window

	Name	Task Name	Company Name	Execute Time	Repeats
<input type="checkbox"/>	Process Leaves	Process Leaf Exceptions	All Companies	09/12/03 20:00:00	Every 1 Days
<input type="checkbox"/>	N/A Friday 2:34	Extract Supply Blocked Dates	Nabisco	09/12/03 14:33:44	No
<input type="checkbox"/>	Process Exception Alerts	Process Exception Alerts	Nabisco	09/12/03 14:34:26	Every 3 Months
<input type="checkbox"/>	N/A Complete Criteria Criterion	Complete Criteria Creation	Nabisco	09/12/03 14:35:49	No
<input type="checkbox"/>	N/A Extract Supply Blocked Dates	Extract Supply Blocked Dates	Nabisco	09/12/03 14:36:02	No
<input type="checkbox"/>	Extract Users	Extract Users	Nabisco	09/12/03 14:36:14	Every 5 Days
<input type="checkbox"/>	Process Aggregate Actions	Process Aggregate Actions	Nabisco	09/12/03 14:36:28	Every 24 Hours

Adding an Event

This feature is accessible to the Superuser, ServerAdmin, and SuperAdmin.

To add an event:

1. Click the **Add Event** button. The **Add Event** screen appears.

Figure 6–3 Add Event Screen

Add Event

Name:

Task:

Company:

Execute Time:

Repeats

2. In the **Name** field, enter the name for your Event.
3. In the **Task** field, select a Process to run from the list.
4. If you are a superuser or serveradmin, select a specific company from the Company list, or select **All** to schedule an event for all companies.

Figure 6–4 Add Event Screen name with selected company name

- The **Execute Time** appears as a date/time combination. The date field initially displays the current date in the default date format dd/mm/yy. You can revise the date format by selecting from options available in Preferences - General. The Time field always displays the time in military format HH:mm:ss and is not affected by time format changes made in Preferences - General.

Note: It is recommended that all installation and user machines be synchronized to avoid apparent discrepancies in reading processing times.

In the **Execute Time** field, you can leave the date/time as displayed to schedule the processing to run or begin immediately or you can edit to schedule the processing to begin later. Be sure to revise the date using the current Date Format defined in Preferences - General. Enter the time in the military format: HH:mm:ss.

The **Execute Time** field initially displays the same time as the selected time zone's local time.

- If the **Repeats** check box is not selected, then your Event executes only one time. The Event is listed on the Events screen only until its processing is completed.

Selecting this check box brings up a field to let you schedule the Event to repeat at designated intervals.

A Repeating Event remains in the Events screen until you delete it.

Once you select an interval type, enter the name for your Event from the Task menu and define how often to run it.

Points to remember:

- Allow enough time for each event to process before the next event begins.
- Schedule at times when processing loads are light.
- Click the **Create** button to save the Event. The Events screen opens displaying the new Event. The Event created can be edited and deleted.

- Click the **Cancel** button to exit the **Add Event** screen without saving.
- When scheduling events, be aware of the Repeat Frequency configured for processing times in Reports, Extracts, Disagg. Setup, Supply Batch, Demand Batch, and Safety Stock screens.
- Processing on a particular feature may or may not occur when a Scheduler Event is executed. Those configuring Repeat Frequency for a feature should be aware of scheduled repeating Events affecting the feature.

Deleting Events

This feature is accessible to the Superuser, ServerAdmin, and Superadmin.

To delete an Event:

- Click **Scheduler** from the VCC menu.
- Click the **Events** tab to display all scheduled events.
- Select the **Delete** check box next to an Event.
- Click the **Delete Selected** button to delete the selected Event.

Working with Tasks

The VCC Scheduler is preloaded with the tasks (commands) required to facilitate basic VCC processing needs. Ordinarily, you do not have to add new tasks for any VCC processing requirements. You can, however, add any other system task (command) and schedule it for processing using the scheduler.

Note: Superadmin will see a list of tasks associated with company-assigned modules; Superuser and ServerAdmin will see a list of tasks associated with Modules listened to the Hub.

See [Scheduler Task Descriptions](#) for a brief description of each preloaded Task.

Table 6–1 Scheduler Task Descriptions

Scheduler Tasks	Descriptions	Type	Step (s) to be run before the Scheduler Task
1. Complete Exception Criteria Creation	- Creates a new aggregate stream, or links to an existing aggregate stream. - Changes the aggregate exception criteria `Status` from Pending to Active .	Independent	This step has to be run only after the aggregate exception criteria has been created.
2. Extract Supply Blocked Dates	- Extracts Supply Blocked Dates from the Oracle Retail VCC Database. - Extracts data to: Syncra\Integrator\Exports\Extraction (Scheduler machine).	Independent	

Table 6–1 Scheduler Task Descriptions

Scheduler Tasks	Descriptions	Type	Step (s) to be run before the Scheduler Task
3. Extract UOMs	<ul style="list-style-type: none"> - Extracts the current Unit-of-Measure (UOM) options from the Oracle Retail VCC database. - Extracts data to: Syncra\Integrator\Exports\Extraction (Scheduler machine). - (Or, to directory path configured in the Oracle Retail VCC Integrator UI). 	Independent	
4. Extract Users	<ul style="list-style-type: none"> - Extracts the current Users from the Oracle Retail VCC database. - Extracts data to: Syncra\Integrator\Exports\Extraction (Scheduler machine). - (Or, to directory path configured in the Oracle Retail VCC Integrator UI). 	Independent	
5. Process Aggregate Actions	<ul style="list-style-type: none"> - Processes In-Process and Resolution actions for all leaf and aggregate exceptions. 	Dependent	<ul style="list-style-type: none"> 1) Recalculate Aggregates 2) Process Aggregate Exceptions
6. Process Aggregate Exceptions	<ul style="list-style-type: none"> - Identifies aggregate data revisions. - Identifies and re-synchs aggregate criteria with any folders marked 'dirty' by hierarchy changes. - Obsoletes any exceptions triggered by items no longer included in folder marked 'dirty' by hierarchy changes. - Identifies any exceptions resulting from the aggregate stream revisions. - Identifies any group exceptions. - Processes Initial actions for all new Aggregate exceptions triggered. 	Dependent	<ul style="list-style-type: none"> 1) Recalculate Aggregates
7. Process Exception Alerts	<ul style="list-style-type: none"> - Sends e-mails to supplied e-mail addresses in Exceptions' Send Alert Requests list. - Run this task after processing exceptions through these tasks: · Process Leaf Exceptions · Process Aggregate Exceptions · Process Leaf Actions , Process Aggregate Actions 	Dependent	<ul style="list-style-type: none"> 1) Process Leaf Exceptions 2) Process Aggregate Exceptions 3) Process Leaf Actions 4) Process Aggregate Actions

Table 6–1 Scheduler Task Descriptions

Scheduler Tasks	Descriptions	Type	Step (s) to be run before the Scheduler Task
8. Process Extract Requests	<ul style="list-style-type: none"> - When an extract request has been created in the Extract UI for any/all of the options: <ul style="list-style-type: none"> · Extracts requested data from the VCC Database. · Extracts data to: Syncra\Integrator\Exports\Retrieval (Scheduler machine). · (Or, to the 'File Path' / 'File URL' as configured in VCC Configuration-Client screen.) - If the data_retrieval.log file (generated in Syncra_Home/integrator/logs directory) contains errors like FileNotFound or NoSuchFileOrDirectory, it could mean the following: <ol style="list-style-type: none"> 1. Either the user who is processing the Extract request does not have permission to the Directory path where the system (integrator) is trying to save the extracted file. 2. The Directory Path where the system is trying to save the extracted file does not exist. 	Independent	
9. Process Leaf Actions	<ul style="list-style-type: none"> - Processes In-Process and Resolution actions for all leaf exceptions. 	Dependent	1) Roll Criteria 2) Process Leaf Exceptions
10. Process Leaf Exceptions	<ul style="list-style-type: none"> - Identifies leaf stream data revisions. - Identifies and re-synchs the any folders marked 'dirty' by hierarchy changes. - Obsoletes any exceptions triggered by items no longer included in folder marked 'dirty' by hierarchy changes. - Identifies any exceptions resulting from the leaf stream revisions. - Tags any aggregates affected by the leaf stream revisions. - Identifies any group exceptions. - Processes Initial actions for all new Leaf exceptions triggered. 	Dependent	Roll Criteria
11. Purge Jobs Monitor	<ul style="list-style-type: none"> - Purges all Job Monitor items (included in purge requests for the hub) in the Purge Request screen at the time this task event is executed. - Purges these items up to the "Retain 'N' number" (initial default = 50k) specified in the edit screen for the Purge Jobs Monitor option in the Purge Data screen. 	Independent	

Table 6–1 Scheduler Task Descriptions

Scheduler Tasks	Descriptions	Type	Step (s) to be run before the Scheduler Task
12. Purge User Activity	- Purges all current connections (included in purge requests) in the Purge Request screen at the time this task is executed.	Independent	
13. Recalculate Aggregates	- Identifies leaf stream data revisions. - Identifies and recalculates aggregates created on folders that were affected by a hierarchy change. - Tags any aggregates affected by the leaf stream revisions. - Updates the tagged aggregates. Identifies any group exceptions.	Dependent	1) Load Stream Data 2) Roll Criteria
14. Recalculate Disaggregation Factors	- Recalculates the Profile factors set in Disagg. Profiles. - Computes the proportion to distribute aggregate values among the aggregates' leaves.	Independent	
15. Recalculate Metrics	-Recalculates all Metrics that are check marked in the Run Override column in the Metrics UI at the time this task event is executed. - Also recalculates whenever the Repeat Frequency time has been reached.	Dependent	1) Load Stream Data 2) Roll Criteria 3) Recalculate Aggregates 4) Process Exception Alerts
16. Report Usage	Whenever this event is executed: - Computes the current collaboration usage status and sends it to Monitor-Usage. - Sends copy of usage status to any email addresses supplied in the Configuration-Billing screen when its Send Email check box is selected.	Independent	
17. Roll Criteria	-Roll the Start Date forward, and obsolete the exception (triggered by the first period) for criteria defined with rolling dates. -Roll Criteria defined using Rolling Period Overlays. -Roll Criteria defined using fixed Period Overlays with Rolling Dates.	Dependent	Load Stream Data

Table 6–1 Scheduler Task Descriptions

Scheduler Tasks	Descriptions	Type	Step (s) to be run before the Scheduler Task
18. Run And Send Reports	<p>- Processes 'flagged' reports (in each format type defined) as created in the Reports UI. (See Step 22 for description on this page.)</p> <p>- For each report where Destination = Email, Sends report (in defined formats) to respective email address supplied.</p> <p>- For each report where Destination = FTP, Sends report to the IPAddress/name with Username/Password.</p> <p>(While processing reports, if java.lang.OutOfMemoryError occurs, the <code>java.runtime.params</code> parameter in the <code>ServerCommon.properties</code> file should be modified to increase the JVM size. This file is found in <code>Syncra_Home/lib</code> directory on the server machine.)</p>	Dependent	1) Load Stream Data 2) Roll Criteria 3) Recalculate Aggregates 4) Process Exception Alerts 5) Recalculate Metrics
19. Run Demand & Lift Factor Batch Requests	<p>- Creates a Demand forecast for each Demand Request created since last time this task event was executed.</p> <p>- Calculates Lift Factors for each Lift Factor request created since last time this task event was executed.</p>	Dependent	1) Recalculate Aggregates 2) Process Aggregate Exceptions
20. Run Demand Batch Requests	<p>- Creates a Demand forecast for each Demand Request created since last time this task event was executed.</p>	Dependent	1) Recalculate Aggregates 2) Process Aggregate Exceptions
21. Run Lift Factor Batch Requests	<p>- Calculates Lift Factors for each Lift Factor request created since last time this task event was executed.</p>	Dependent	1) Recalculate Aggregates 2) Process Aggregate Exceptions
22. Run Reports	<p>- Processes all reports that had been 'flagged' at the time this task event is executed.</p> <p>- Reports will be flagged in one of two ways:</p> <p>- The 'Run' schedule defined in the Report UI has been reached.</p> <p>- The Override Run Schedule check box for a Report has been selected in the Report-List screen.</p>	Dependent	1) Load Stream Data 2) Roll Criteria 3) Recalculate Aggregates 4) Process Exception Alerts 5) Recalculate Metrics
23. Run Safety Stock Batch Requests	<p>- Calculates Safety Stock for each Safety Stock Calc Request created since last time this task event was executed.</p>	Dependent	1) Recalculate Aggregates 2) Process Aggregate Exceptions 3) Process Aggregate Actions

Table 6–1 Scheduler Task Descriptions

Scheduler Tasks	Descriptions	Type	Step (s) to be run before the Scheduler Task
24. Run Supply & Safety Stock Batch Requests	<ul style="list-style-type: none"> - Creates a Supply Plan for each Supply Request created since last time this task event was executed. - Calculates Safety Stock for each Safety Stock Calc Request created since last time this task event was executed. - Also runs if Run Override is performed on a batch job, or if the Repeat Frequency time has been reached. 	Dependent	<ul style="list-style-type: none"> 1) Recalculate Aggregates 2) Process Aggregate Exceptions 3) Process Aggregate Actions
25. Run Supply Batch Requests	<ul style="list-style-type: none"> - Creates a Supply Plan for each Supply Request created since last time this task event was executed. - Also runs if Run Override is performed on a batch job, or if the Repeat Frequency time has been reached. 	Dependent	<ul style="list-style-type: none"> 1) Recalculate Aggregates 2) Process Aggregate Exceptions 3) Process Aggregate Actions
26. Send Promotion Alerts	<p>For any email addresses/notification offsets supplied within any Promotion:</p> <ul style="list-style-type: none"> - Sends email notification about Status changes to Promotion. - Sends email notification about Milestone Due Date changes to Promotion. 	Independent	
27. Send Reports	<p>For each report where the Report's Destination = E-mail</p> <ul style="list-style-type: none"> - Sends report (in defined formats) to respective email address supplied. - For each report where Destination = Extract - Extracts data to: Syncra\Integrator\Exports\Retrieval (Scheduler machine). - (Or, to directory path configured in the Report UI.) 	Dependent	<ul style="list-style-type: none"> 1) Load Stream Data 2) Roll Criteria 3) Recalculate Aggregates 4) Process Exception Alerts 5) Recalculate Metrics
28. Update Promotions	<ul style="list-style-type: none"> - Performs system updates to Promotion Status. - Updates Condition based on Milestone Due Dates. 	Independent	
29. Process Events Totals	<ul style="list-style-type: none"> - Process the computation of Totals for Events and Promotions. 	Independent	

Note: The logs are written to the VCC_HOME/bin/logs when the demand and replenishment tasks are run using the scheduler. If the same jobs are run at the command line, the log files are extracted to the VCC_HOME/bin.

However, the remaining logs are written to the VCC_HOME/bin directory irrespective of whether the tasks are run from the scheduler or the command line.

Adding a Task

This feature can be accessed by the Superuser, ServerAdmin, and Superadmin only.

You can create a new task for any valid Windows or Unix command. The Task/command is listed and remains available until deleted.

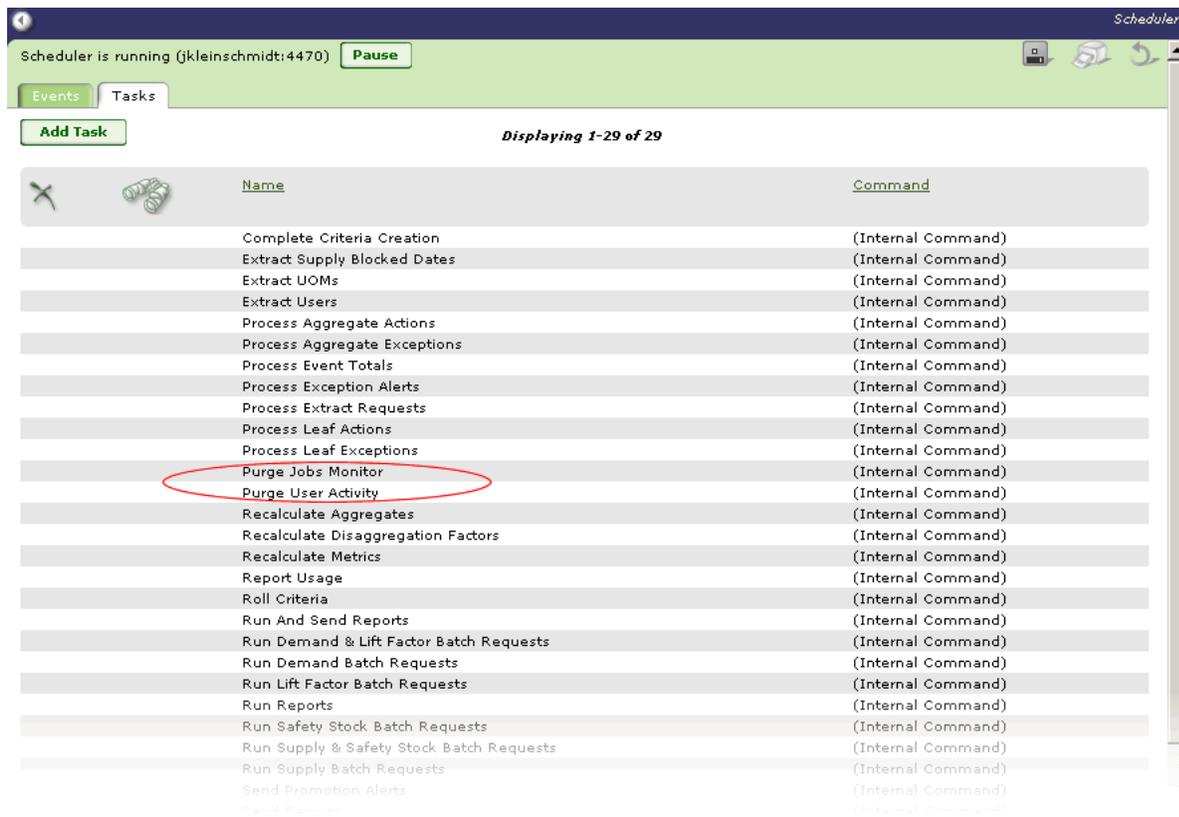
Note: Do not use double quotes in task fields. It can cause the Scheduler's List screen Export Data icon to extract a file with incorrectly formatted fields for this Task.

To add a task:

1. Click **Scheduler** from the VCC menu.
2. Click the **Tasks** tab. The **Tasks** screen appears.

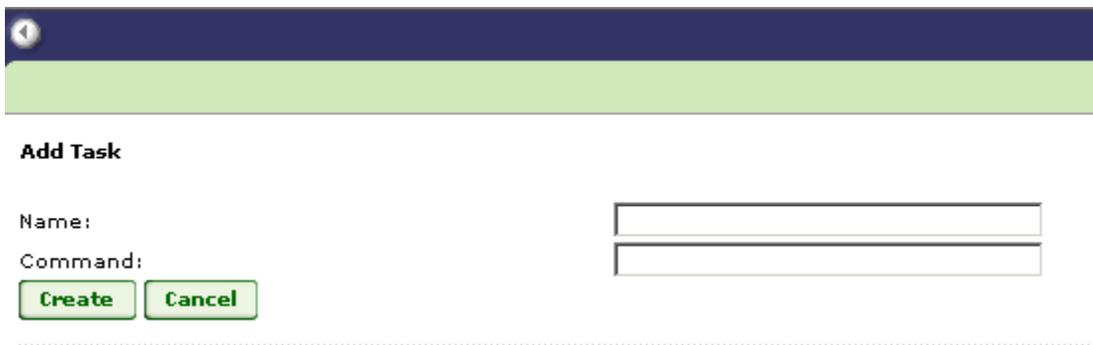
Note that there are two types of scheduler task that appear only to superuser and serveradmin roles. These are Purge Jobs Monitor and Purge User Activity, as seen below.

Figure 6–5 Tasks Screen



3. Click the Add Task button to create a new task.

Figure 6–6 Add Task Screen



4. In the **Name** field, enter the task name.
5. In the **Command** field, enter the task command.
6. The new task is listed. It can be selected, edited, and deleted. Click the **Cancel** button to exit this dialog without saving.

Editing a Task

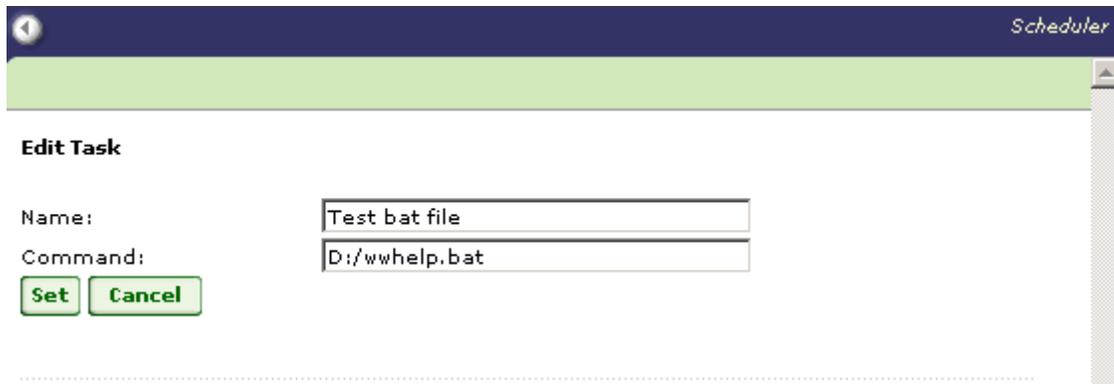
This Feature can be accesses by the Superuser, ServerAdmin, and SuperAdmin only.

User-created Task names and commands can be modified at any time. Preloaded Tasks cannot be changed.

To edit a user-created task:

1. Click the **Edit** button (colored dot) next to a task.
2. The **Edit Task** screen opens and allows you to revise the Task name and command (if allowed).

Figure 6–7 Edit Task Screen



3. Click **Set** to set the edit or **Cancel** to return to the Scheduler screen.

Deleting a Task

This feature can be accessed by the Superuser, ServerAdmin, and SuperAdmin only.

A user-created Task is listed with a **Delete** check box next to it. User-created tasks can be deleted at any time. Preloaded tasks cannot be deleted.

To delete a user-created task

1. Select the **Delete** check box next to the user-created Task.
2. Click the **Delete Selected** button to delete the selected Task.

Stopping a Task

VCC does not allow a job or a process to be stopped/aborted while in progress.

Starting and Stopping the VCC Server

This section includes the following:

- Starting and stopping the VCC Server in Windows environment.
- Starting and stopping the VCC Server in UNIX environment.

For Windows Environment

To start the VCC Server

- Select **VCC - VCC Server - Start** from the VCC Program group.

To stop the VCC Server

- Select **VCC -VCC Server - Stop** from the VCC Program group.

For Unix Environment

To start the VCC Server

1. Change your working directory to:

```
[VCC_HOME]/server
```

2. Enter the command:

```
./startWeblogic.sh
```

To stop the VCC Server

1. Change your working directory to:

```
[VCC_HOME]/server
```

2. Enter the command:

```
./Syncra_Server_Shutdown
```

Backup and Recovery tasks

Since VCC is an Oracle database-based application, all the best practices for backup and recovery of an Oracle database are applicable to VCC. These include regular backups, running the database in archive log mode, sending backups and archive logs to an off-site location, etc. Similar guidance is offered regarding other "infrastructure" components of the VCC application, including the operating system, Weblogic application server, and Apache web server.

Data and Files Requiring Backup

Take a back up of the following data and data files:

- Oracle Database
- Software and Configuration Files
- Infrastructure Software Log Files
- Inbound Interface Files
- Outbound Interface Files
- VCC Log and Result Files

Oracle Database

As most VCC data resides in the Oracle database, this data is critical to VCC.

Software and Configuration Files

The software (including VCC, Weblogic, Apache and Oracle) along with the associated configuration files are necessary for the application to function.

Infrastructure Software Log Files

Software such as the Weblogic server create log files and modify other data on a frequent basis. While this is not business data, it does contain information that may be helpful when triaging problems.

Inbound Interface Files

Inbound interface files are loaded into VCC as part of nightly batch processing. These initially reside in the import directory and should be considered business data. Once loaded, these files are moved into the processed directory and subsequently archived and purged.

Data which cannot be loaded successfully is put into .reject files which are subsequently reloaded after business users make the necessary application corrections and make a request to the Application Support team.

There are other diagnostic files created as part of the inbound interface processing; these .log and .missing files are not particularly business-critical; the archive/purge process keeps these to a manageable number.

Outbound Interface Files

Outbound interface files are created by business user every day. You can only extract the current data. The previous day's data cannot be extracted, unless the database has been incompletely recovered the previous day. However, users can repeatedly run this extract during the day.

VCC Log and Result Files

A few log and result files are accessible within the application through hyperlinks. These are generated both during the nightly batch and during the day as users run "once-off" batches. These also reside in the Unix filesystem. Though the contents may not be necessary for business processing, the absence of these files will create an abnormal experience for end users.

Backup Strategy

The backup strategy involves the following files:

- Software and Configuration Files
- Infrastructure Software Log Files
- Inbound Interface Files
- Outbound Interface Files
- VCC Log and Result Files

Software and Configuration Files

These files are generally quite static and a nightly backup is sufficient. This backup should be strengthened with a robust Change Control process whereby any changes to software and configuration are tracked in a log. Thus, any software or configuration backup could be "walked forward" to any point in time by repeating the actions indicated in the Change Log.

Infrastructure Software Log Files

This data does not need to be backed up. However, as it contains helpful administrative information it should, at a minimum, be included in the nightly backup

of the software and configuration files. Backing this up more frequently provides a more up-to-date understanding should things go wrong; ultimately this could be as frequent as the other VCC files described in the following section.

Inbound Interface Files

These files are loaded into the system during nightly processing and end up in the `/var/opt/vcc/data/processed` directory along with `.log`, `.missing`, and `.reject` files. As well, over the day late files may arrive to `/var/opt/vcc/data/import`. The processed directory should be backed up immediately after the batch (names begin with `3TRANS*`, `3PRODUCT*`, and `3STORE*`). The import directory could be backed up at the end of the day, though these files should exist on the source systems as well.

Outbound Interface Files

These files should be backed up after 2 pm, which is when business users are meant to create them. The backup pattern should be `/var/opt/vcc/data/processed/3REPLEN*`; these files are also put onto `/var/opt/vcc/export`.

VCC Log and Result Files

These files are created after the batch and throughout the day. The ideal strategy for these files would be to do an incremental backup of this directory tree on a frequent basis for example every 15 minutes. However, you can take a backup of the files immediately after batch completion and again at the end of the business day.

Regardless of backup frequency, some times a back up of the the changes made to the files does not happen. If these changes cannot be recovered, users will get a "File Not Found" error. However, if necessary, users can re-generate reports and extracts.

Recovery

In a recovery scenario the system is restored from backup and then "brought forward" to the time of failure. Managing recovery with VCC is no different. The majority of business data in VCC resides in the Oracle database. The following files are part of the recovery process:

- Software and Configuration Files
- Inbound Interface Files
- Outbound Interface Files
- VCC Log and Result Files

Software and Configuration Files

Recovery involves restoring from backup and walking forward through the Change Logs, if necessary. It is not possible to recover these files beyond what exists in the filesystem backup. The contents of these files is re-created in substance (if not exactly) as the system is rolled forward during manual catch-up.

Inbound Interface Files

Inbound files arrive to the import directory from the business. They remain there until the batch processes them and place them into the backup directory.

In a recovery scenario, files may have to be reloaded. Reload scenarios are described below; the files themselves should be restaged in the `/var/opt/vcc/import` directory.

These may exist in the backup directory, on the tape backup, or they may need to be retrieved from the original source system.

Some of the reload scenarios are as follows:

- When an Inbound Interface File is Reloaded
 - The application supports reloading interface files and handles the situation where the same record is loaded twice. If exactly the same file is loaded twice, what happens to the records within will depend on the data already in the database. This is summarized in the following table:

Table 6–2 Reloaded Interface File Results

Record's CREATION_DATE is	Result
Less than the existing record's PREV_CREATION_DATE	Incoming record is ignored.
Between the existing record's CREATION_DATE and PREV_CREATION_DATE	The PREV_QTY field is updated.
Greater than the existing record's CREATION_DATE	The QTY field is updated and the current QTY/CREATION DATE values are moved to the PREV_QTY/PREV_CREATION_DATE fields.

What comprises the primary key depends on the individual interface. On the filesystem side, the .reject, .missing, and .log files are created as before. If a file is loaded, all traces of that file are removed from the processed directory, and the file is loaded again, the files in the processed directory would be identical to what they were after the original load.

- Recovering Inbound Interfaces After Complete Database Recovery
 - After a complete database recovery, the only reason to reload the interface files would be to recreate .reject files that were unable to be retrieved from backup. Recall these files contain business data (records which were intended to be loaded but could not because of missing metadata).

Thus, if there is a database recovery and the processed directory has also needed to be recovered from backup, there will be a time gap on the filesystem between the point-in-time of the filesystem backup and the current database time.

These .reject files can be recreated by reloading the files that had been originally loaded during this gap, even though the database already contains loaded records from these files. See Table 1 - Reloaded Interface File Results

- Recovering Inbound Interfaces After Incomplete Database Recovery

In a scenario where the database has been incompletely recovered, there are two possible states of the data on the filesystem.

- When Filesystem is Behind the Database

Recovering the interface files in this scenario is identical to the Complete Database Recovery scenario.

- When Filesystem is Ahead of the Database

In this scenario, there are two choices. Choice one is to remove all processed files with a filesystem date stamp after the database time. Choice two is to

ignore the files as they should be overwritten as the system is manually walked forward.

The second choice is simplest, though the processed directory files will not have been loaded and this could become confusing to the administrators.

Outbound Interface Files

The replenishment plan interface is currently manually generated. As there is no date parameter to this program, it will generate the current replenishment plan as it exists in the system at the time of invocation.

A backup of an historic file can be obtained by the point-in-time recovery of the database.

VCC Log and Result Files

It is not possible to recover other VCC files beyond what exists in the backup. As these files are generally created by running batch jobs, reports, and extracts they will be re-created as the system is rolled forward during manual catch-up.

Purge Requests

It's the responsibility of the Admin users to create requests for data to be purged from the system.

For Transactional Data purges, there are several options to consider for defining what data is to be purged. The Purge Request screen allows administrators to make the requests. Purge requests are accepted or rejected by the system superuser.

Figure 6–8 Purge Request Screen

The Admin user selects the Stream Type(s) to be purged, and whether the data is Leaf-level or Aggregate Level (or both). Finally, the Admin selects the time range for the data to be purged based on either the data's Creation Date or the data's location across the VCC VCC time Periods.

Note: Time range definitions can be either Fixed or Rolling.

For Master Data Purging, Administrators have to drop master data items into the Recycle Bin. The SUPERUSER can then initiate the Master Data Purge, which will remove all items that are in Recycle Bins for all companies.

A

Integrator Data Loader and Data Extractor Field Definitions

This Appendix contains the following topics:

- About Loaders and Extractors
- Collaboration Item Loader
- Collaboration Item Extractor
- UOM Conversion Loader/Extractor
- Scheduler Custom Tasks Loader
- User Extractor
- Leaf Stream Loader
- Stream Extractor
- Aggregate Stream Loader
- Context Comments Loader/Extractor
- Exception Loader/Extractor
- Exception Criteria Loader/Extractor
- Price Profiles Loader/Extractor
- Events Loaders
- Metrics Loader/Extractor
- Aggregate Definitions Loader
- Collaboration Product Hierarchy Extractor
- Demand Policy Loader/Extractor
- Demand Stream Set Loader
- Supply Policy Loader/Extractor
- Supply Blocked Dates Loader/Extractor
- Supply Stream Set Loader
- Disaggregate Profile Loader/Extractor
- Disaggregate Profile Factors Extract

About Loaders and Extractors

Constant Values

When deciding whether or not to use a numeric or a string value for a particular field, be aware that the “Value” column in the following tables uses quotes to indicate when a string is accepted. In the Metrics and Exceptions Loaders/Extractors, string constants are contained in quotation marks, since either a numeric or a text value can be given. For instance,

0 = “False”

1 = “True”

This indicates that “True” and “False” as well as 0 or 1 are viable options.

In all other instances, where only numeric constants are accepted, numeric values and their definitions will appear as below.

0 = False

1 = True

Note: When naming data files or control files, use of the ampersand (&) character is not allowed.

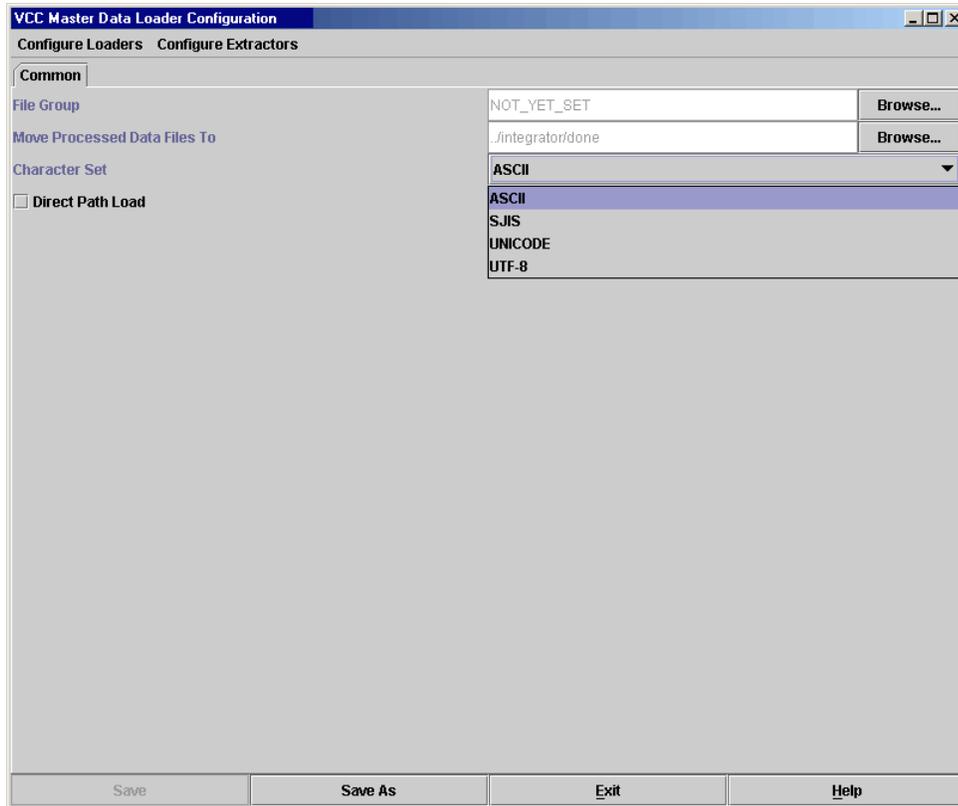
The data file must have at least one record. You cannot specify all parameters as global values.

The template file name for the Master Data loader is MasterDataLoader.template.

The Master Data Loader has a Common tab only. You must specify the File Group, the location of the processed data files, the character set, and whether to use the Direct Path Load feature or not.

On the Common tab, the following Extractors do not have the character set field:

- Master Data Extractor
- Collaboration Product Hierarchy Extractor
- Collaboration Items Extractor
- Disaggregate Profile Extractor
- Price Profile Extractor
- Exceptions Extractor
- Exception Criteria Extractor
- Demand Policy Extractor
- Supply Policy Extractor
- Metrics Extractor



Check the Direct Path Load check box to add data directly to the database. The VCC Master Data Loader allows you to add (or update) information directly to your database using the Direct Load feature. The Direct Load feature bypasses the VCC server and adds data directly to your database. The performance increase is dramatic. Currently, you can only use the Direct Load tool when adding data. In most instances, you would want to use it when initially populating your database with product data. Although direct load bypasses the VCC Server, the VCC Server must be running while doing a direct load.

This feature is currently limited to the product hierarchy. Master Data cannot be removed using this feature.

Note: It is not necessary that the VCC Master Data Loader run on the same machine as the database or the same server.

Once a direct load is performed, in order to see the loaded trees in the Client, you must stop and restart the VCC Server.

Master Data Loader Rules

The following rules should be kept in mind when loading Master Data:

- If the LIN value is empty in the file, the GIN value will be copied for LIN
- If the LIN Type value is empty in the file, and LIN has a value, then the default value (Seller_Assigned - 3) will be loaded.
- If the GIN Type value is empty in the file, the default value (upc - 2) will be loaded.

- If both LIN and LIN Type are empty, the GIN and GIN Type values will be loaded for LIN and LIN Type respectively.
- If the Alternate Location ID is empty in the file, the Global Location ID will be loaded as an Alternate ID.
- If the Alternate Location ID Type is empty in the file, the default value of 5 (duns_plus_four) will be loaded as Alternate ID Type.
- Master Data Loader files are case sensitive.

Note: The Direct Path Loading method will reject duplicate relationship records, while the conventional method does not reject duplicate relationship records.

Collaboration Item Loader

The template file name for the Collaboration Item loader is **CollabItem.template**.

The VCC Collaboration Item loader allows you to load a file containing collaborations you want to include in your VCC database or extract collaborations from your VCC database. A collaboration consists of two companies in a trading partner relationship and the products on which they intend to collaborate. The actual collaboration file can contain the fields shown in Table 1, “Collaboration Item Loader Field Descriptions”.

Note: When a creator company loads collaborations through the Collaboration Item Loader, VCC will check for matching partner collaborations. If the partner collaboration does not exist, it will be created.

Table A-1 Collaboration Item Loader Field Descriptions

Column Name	Description	Value
Company ID	The ID of the company that created the data for the stream.	DUNS
Location ID	The location ID of the company. Location ID can be specified at the leaf-level only.	Duns+4
Partner Company ID	The ID of the partner company.	DUNS
Partner Location ID	The Partner Location ID. Partner Location ID can be specified at the leaf level only.	Duns+4
Global Item Number	The product’s ID	Up to 40 character alphanumeric product ID

Sample Collaboration Item Datafile

In the sample file below, the comma-delimited fields represent the creator company ID, the creator location ID, the partner company ID, the partner location ID, and the Global Item Number, respectively.

```
10-124-1107,10-124-1107-0001,30-333-3333,30-333-3333-0001,0125468712
10-124-1107,10-124-1107-0001,30-333-3333,30-333-3333-0001,0168846122
10-124-1107,10-124-1107-0001,30-333-3333,30-333-3333-0001,0684322712
```

Collaboration Item Extractor

The fields you can define for the Collaboration Item Extractor are:

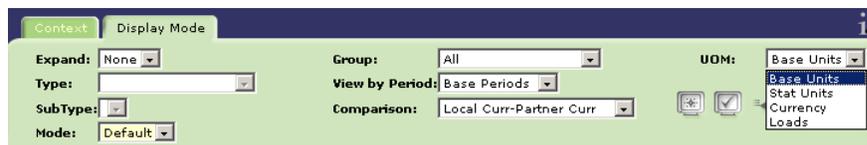
Table A-2

Column Name	Description	Value
Creator Company ID	The ID of the company that created the data for the stream.	DUNS
Creator Location ID	The location ID of the company. Location ID can be specified at the Leaf-level only.	Duns+4
Partner Company ID	The ID of the partner company.	DUNS
Partner Location ID	Partner Location ID can be specified at the Leaf-level only.	Duns+4
Global Item Number	The product's ID.	Up to 40 characters

UOM Conversion Loader/Extractor

Unit-of-measure (UOM) conversion allows you to standardize the units of measure in the data streams you intend to load into VCC using a conversion factor. Usually, the conversion factor is used to convert a product UOM that includes individual units such as "EA" (each) into a base unit UOM such as "CASE." By default, all values for a database stream must be in individual units so you are converting individual units to whatever aggregate value you require such as SIXPACKS or CASES. Once you create the UOM conversion factor for a product, each time it is loaded the conversion factor is applied to it.

Also, you can apply a conversion factor using the VCC Client. When you load a conversion factor, the factor appears in the Client in the data stream's Display Mode tab on the context chooser. You then can use the factor to display the data stream in the specified UOM.



For example, if a supplier sends you a forecast that uses individual units as the unit of measure for soda, and you, as the retailer want to display the product in cases (12 units per case), you could specify a conversion factor of 12.

Note: All partner data streams are converted using the local company's conversion factor.

Products also have universal product codes (GINs) to identify them (called the Global Item Number). The GIN for a "case" of soda is different than the GIN for a single bottle of soda. When you use UOM conversion, you must specify the new Global Item Number of the converted unit.

To convert units of measure for products in your database, you would typically have to follow the steps given below:

1. Create a unit-of-measure conversion file that would contain the GINs for products in your database whose UOMs you want to convert.

2. Create a control file that describes the layout of the unit-of-measure conversion file, the GINs, and the unit-of-measure conversion factor.
3. Load the control file using the VCC Integrator.

When you load the unit-of-measure conversion file using the VCC Integrator, it creates a UOM conversion table. Each time you perform a data load, the table is queried to determine if a product's GIN is specified in the table. If it is, the conversion factor is applied.

When the product unit of measure is displayed in the VCC Client, it is always displayed in terms of the local company's base-to-case price. For example, if your company and your trading partner's company each set a base price for Planters Cashews, and you log in and choose the price view, you see all data in terms of your price including your partner's forecast/results data. If you log in as your trading partner and choose the price view, you see all data in terms of your trading partner's price.

The unit-of-measure loader allows you to enter a unit-of-measure for a product. The field you can define for the unit-of-measure loader are described in Table 3, "UOM Conversion Loader/Extractor Field Definitions".

Table A-3 UOM Conversion Loader/Extractor Field Definitions

Column Name	Description	Value	Optional
Creator Company ID	The ID of the company to which this product belongs for whom you are loading the UOM conversion. Example: 30-333-3333.	Global_companyID	No
Global Item Number	The product's ID (GIN code). Example: 0168846122.	Up to 40 character alphanumeric	No
Product UOM.	The unit-of-measure for the product.	Example: "EA" (each). Up to 40 character alphanumeric.	No
Other Global Item Number	This is the new Global Item Number for the converted product.	Up to 40 character alphanumeric.	No
Other UOM	This is the name of the new unit-of-measure into which you are converting the product. It is the name that will appear in the data stream Display Mode tab under UOM. For example, if you are converting from "each" to "case", this new UOM can be named: "CASE".	Up to 40 character alphanumeric.	No
Multiplier	The conversion factor used to convert the number of individual units into the required unit-of-measure. Example: to convert individual units into SIXPACKS, the multiplier would be "6."	Numeric	No

The validation rules for this parser are described in "Integrator Validation Rules".

Sample UOM Conversion Datafile

In the following sample line from a UOM conversion file, a UOM conversion factor is created for the Global Item Number 0168846122 that converts the product from "EA" (each) to "CASE" by multiplying it by the conversion factor of "26" which is the number of units in a case. The UOM "CASE" is added to the list of UOMs displayed in

the Client. When this product is loaded, the conversion factor of "26" is applied to it and a new Global Item Number is created called 0168846122CASE.

Example:

30-333-3333,0168846122,EA,0168846122CASE,CASE,26

In the following sample line from a UOM conversion file, a UOM conversion factor is created for the Global Item Number 0684322712 that converts the product from "EA" (each) to "EIGHTPACK" by multiplying it by the conversion factor of "8." The UOM "EIGHTPACK" is added to the list of UOMs displayed in the Client. When this product is loaded, the conversion factor of "8" is applied to it and a new Global Item Number is created called 0684322712EIGHTPACK.

Example:

30-333-3333,0684322712,EA,0684322712eightPACK,EIGHTPACK,8

Scheduler Custom Tasks Loader

The control file template for the Task Loader is SchedTasks.template.

You can only load tasks; you cannot extract them. Do not use double quotes in the task fields.

The fields you can define for the Tasks loader are described in Table 4, "Scheduler Custom Task Loader Field Definitions".

Table A-4 Scheduler Custom Task Loader Field Definitions

Column Name	Description	Value
Name	The task name.	Up to 40 character alphanumeric.
Command	The task command.	Up to 1000 character alphanumeric.

Note: Any Extract Through Scheduler errors are now reported in the <Synkra_Home>\integrator\logs directory.

User Extractor

The User extractor does not have an user-defined fields. It contains only two tabs: **Common** and **User Settings**. The Common tab allows you to specify the output location of the extracted file and the character set used; the **User Settings** tab allows you to specify a delimiter for the extracted user file.

The following table shows the extract format.

Table A-5 Extract Format

Term	Description
L	"L" designates a leaf node.
User Name	The new user name.
Password	The new user password.
Role	superadmin, limitedadmin, admin, manager, supervisor, planner, reviewer
Login Allowed	1 = allowed; 0 = not allowed

Table A-5 (Cont.) Extract Format

Term	Description
e-mail	The user e-mail address.
en_US	The language preferences.
USER_TYPE	0 = Regular User; 1 = System User
Real Name	Real name of user
Telephone Number	User telephone number
Fax Number	User FAX number

Example

The following example shows the extractor format for users.

```
,
H,A,111111,USER
L,Smith,demo,admin,1,smith@acme.com,en_US
```

Leaf Stream Loader

LeafStreams.template file

The Leaf Stream loader (formerly Data Stream Loader) allows you to describe the format for the data stream file you intend to bulk load or extract. For example, not all companies use all the fields allowed or specify them in the same column position. The Integrator lets you specify which fields you are using and the column position of each field. Basically, you are describing how your ASCII-delimited data stream files are structured - the fields contained in your data streams and the columns in which the fields appear. The validation rules for this parser are described in "Integrator Data Loader and Data Extractor Field Definitions."

Note: If the same record exists in two different data files in the same load, it is treated as a duplicate record.

Once you devise an adequate format, you should not have to change or modify this file for subsequent data loads sent to you by the trading partner as long as subsequent data streams adhere to the agreed-upon format.

Any or all of the following fields are allowed described in Table 5, "Leaf Stream Loader Fields".

Note: The streams for which you wish to load data must be assigned to the company before you attempt the data load.

Note: If you are loading leaf stream data for balance streams on a daily database with consecutive periods and the "fill bucket" option turned on, it may result in multiple records for that stream type code. If this occurs, the record will be rejected with a "duplicate rows" error.

When the Integrator has completed the loading process, it will move the last data file from the file group to the archive directory.

Note: When the creator company loads data, Xt will check for pre-existing collaborations. If collaborations exist, partner collaborations will not be created.

After loading, file(s) will be created that contain a list of any missing products, locations and periods for the Leaf Stream and Aggregate Stream Loaders. A sample list would resemble the following:

```
//Products not found
[file_name].502.missing
//Creator locations not found
[file_name].503.missing
//Partner locations not found
[file_name].504.missing
//Periods not found
[file_name].505.missing
```

If you want to overwrite Comments (that have already been loaded) with spaces, comments value should be " ". i.e., Null during loading.

Table A-6 Leaf Stream Loader Fields

Column	Description	Value	Optional
Creator Company ID	The Global Company ID of the company that created the data for the stream.	Up to 40 characters	Yes*
Creator Location ID	The location ID of the company.	Up to 40 characters	Yes*
Partner Company ID	Your trading partner's company ID.	Up to 40 characters	Yes*
Partner Location ID	Your trading partner's location ID.	Up to 40 characters	Yes*
Global Item Number	The product's ID.	Up to 40 characters	Yes*
Data Stream Type Code	The type code you configured for the data stream.	Type Code	No
Period Begin	The data stream's beginning time period.	YYYYMMDD	No
Period End	The data stream's ending time period.	YYYYMMDD	No
Data Stream Item Type Code	The item type code you configured for the data stream item.	Item Type Code	No
Quantity	The data amount.	Numeric	No

Table A-6 (Cont.) Leaf Stream Loader Fields

Column	Description	Value	Optional
Creation date	The creation date of the stream. You cannot load a stream into the current stream table that has a creation date less than or equal to the <code>prev_creation_date</code> . For example, if you loaded a stream with a creation date of 10/30/2001, and the previous date is 10/29/2001, you cannot load a new stream with a date equal to or prior to 10/29/2001. Also note that the creation date is translated into GMT in the database according to the time zone selected.	Format: YYYYMMdd or YYYYMMdd HHmmSS or YYYYMMdd HHmmssSS	No

Table A-6 (Cont.) Leaf Stream Loader Fields

Column	Description	Value	Optional
Reason Code	The reason for the change to the data stream.	The comment reason codes are as follows: 0 = none specified 1 = New promotion 2 = Expanded promotion 3 = Revised promotion 4 = Reduced promotion 5 = Cancelled promotion 6 = Weather-related event 7 = Miscellaneous event 8 = Production issue 9 = Distribution issue 10 = Transportation issue 11 = Overstock condition 12 = Inventory policy change 13 = Order policy change 14 = Forward buy 15 = Price change 16 = Revised plan (re-plan) 17 = Product changeover 18 = New product 19 = Discontinued product 20 = New location 21 = Store closure	Yes
Comment	A comment that is associated with the product data stream.	Up to 1000 characters	Yes

Table A-6 (Cont.) Leaf Stream Loader Fields

Column	Description	Value	Optional
Unit of Measure	Unit of measure used for products in the data stream. The default base units UOM is "EA", which is the default if left blank. UOM field could be blank or Base UOM if the quantity you are loading is in Base Units. Use custom UOM if the quantity you are loading is in converted units. If you are using a UOM other than the default, for example CASES, the UOM you are using must be available in the UOM table. It must match the UOM specified in the "Other UOM" field for this company and other Global Item Number.		Yes
User name	The name of the user responsible for the data load.	Up to 40 characters	No
Creator Company ID Type	The ID Type of the company that created data for the stream.	Numeric	Yes
Creator Company Alternate ID	The Alternate ID of the Creator Company	Up to 40 characters	Yes*
Creator Company Alternate ID Type	The Alternate ID Type of the Creator Company	Numeric.	Yes
Creator Location ID Type	The ID Type of the Creator Location	Numeric.	Yes
Creator Location Alternate ID	The Alternate ID of the Creator Location	Up to 40 characters	Yes*
Creator Location Alternate ID Type	The Alternate ID Type of the Creator Location	Numeric	Yes
Partner Company ID Type	The ID Type of the Partner Company	Numeric	Yes
Partner Company Alternate ID	The Alternate ID of the Partner Company	Up to 40 characters	Yes*
Partner Company Alternate ID Type	The Alternate ID Type of the Partner Company	Numeric	Yes
Partner Location ID Type	The ID Type of the Partner Location	Numeric.	Yes
Partner Location Alternate ID	The Alternate ID of the Partner Location	Up to 40 characters	Yes*

Table A-6 (Cont.) Leaf Stream Loader Fields

Column	Description	Value	Optional
Partner Location Alternate ID Type	The Alternate ID Type of the Partner Location.	Numeric	Yes
Global Item Number Type	The product's Type of Global Item Number.	Numeric.	Yes
Local Item Number	A proprietary unique identifier for this product.	Up to 40 characters	Yes*
Local Item Number Type	The Type of Local Item Number	Numeric.	Yes
Revision Status	Revision Status Codes: "0" or nothing specified = none 1 = new 2 = acknowledged 3 = accepted 4 = rejected 5 = superseded	Numeric	Yes

Conditionally Optional Fields

*Although marked "Yes" in the Optional column, these fields are conditionally optional, based on whether or not other information has been provided. The introduction of "Alternate" IDs in version 6.1 means that not only are the Alternate fields optional, but the Global fields become optional if a matching Alternate field is provided. VCC requires that some ID be given, whether it is global, alternate, or both for Location, Partner Location, Company, and Product.

For example, if you supply the "Creator Company Alternate ID", you have the option of providing the global "Creator Company ID", and vice versa. One or the other must be provided and you may supply both if desired.

Table A-7 Type Constants for Product

Column	Description
GTIN	1
UPC	2
SELLER_ASSIGNED	3
BUYER_ASSIGNED	4

Table A-8 Type Constants for Company and Location

Column	Description
GLN	1
DUNS	2
SELLER_ASSIGNED	3
BUYER_ASSIGNED	4
DUNS_PLUS_FOUR	5

Table A-8 Type Constants for Company and Location

Column	Description
SCAC	6
UN_LOCATION_CODE	7

If the creator company is a buyer company, it cannot load the leaf stream and aggregate data for seller-only editable streams. If the creator company is a seller company, it cannot load the leaf stream and aggregate data for buyer-only editable streams.

Note that in the Creation Date field, if the hour, minute, or seconds is more than 24, 60 and 60 respectively, the date is moved forward. For example: 20020210340101 (YYYYMMddHHmmss - GMT)

becomes 20020211100101.

Sample Leaf Stream Loader Datafile

The following sample files use the pipe (|) character as the file delimiter.

```
20011018203631 |Dave Wilson |10-124-1107 |10-124-1107-0001 |30-333-3333
|30-333-3333-0001 |0168846122 |20020107 |20020113 |21 |17 |1 |Comment |0
```

Revision Status Codes for Leaf Stream Loader

Blank or "0" ---> None

1 ---> New

2 ---> Acknowledged

3 ---> Accepted

4 ---> Rejected

5 ---> Superseded

Creator Role Constants for Extractor

Buyer ----->2

Seller ----->1

Stream Extractor

The template file for the Stream Extractor is ExtractDataStream.template.

The Stream Extractor uses the following rule when extracting data:

- If you are extracting data using multiple control files in one batch job, the Stream Extractor will create one Monitor - Job entry for each control file

You can extract data stream data in any of the following four units of measure.

- **Base Units** — the unit of measure in which the data stream was originally created.
- **Stat Units** — the statistical factor conversion number. Stat factor multiplies the data stream quantity by the statistical value setup for the product (by the VCC administrator) for the company of the user doing the retrieval. For example, assume you are doing an extract on a product and select "Stat Units". The statistical factor for the product is 2.7. All data stream quantities are multiplied by 2.7 and extracted.

- **Load** — value used as the denominator in a division of the quantity as numerator. Load is stated as the number of units per load, rather than the loads per unit. The result is the number of loads required for that period between the ship-from/ship-to locations.
- **Currency** — multiplies the data stream quantity by the current price data stream. (You can view the current price data stream in the promotional plan section of VCC, which is located in the Local Current Price row). The Local Current Price value is equal to the Base Price by default; the value will change to reflect the last entered promotion event. Using the same example as above, if Nabisco has a price data stream for all periods of \$3.14, all data streams created by Nabisco will be multiplied by \$3.14. If you are extracting your partner's data, that will also be multiplied by \$3.14.

Note: If your data stream does price conversion for products, only those time periods that include a price are extracted. For example, if you have a data stream with 52 time periods and only 30 time periods contain a price, the 30 periods with the price are extracted and the remaining periods without a price are dropped and not extracted.

The output file configuration can be modified in such ways as file format, column definitions, etc.

All data file values are understandable to the user in the Data Stream Extractors except "Source_Code" values. This field uses VCC-Standard values and is interpreted as follows:

Table A-9 Source Code Value and Description

Description	Source Code Value (Constant Number)
Data Stream Load	0
Manually Entered Data	1
Affected By Events Promotions	2
Affected By Price Profile	3
Affected By Disagg Profile	4
Affected By Loading Events Promotions	5
Affected By Loading Price Profile	6
Affected By Loading Disagg Profile	7
Affected By Creating Lift Factors	8
Affected By Safety Stock Calculation	9
Affected By Supply	10
Affected By Loading Action (Exceptions)	11
Affected By Supply Policy Recalculation	12
Affected By Loading Demand Policy	21 (migrated from VCC Demand which is the Data Load)

The fields you can define for the Stream Extractor are described below:

Table A–10 Stream Extractor Field Definitions

Column	Description	Value
Creation Date	The creation date of the stream.	The creation date of the stream data extracted.
Creator Company ID	The ID of the company that created the data for the stream.	Global_company_id
Creator Location ID	The location ID of the creator company.	DUNS_PLUS_FOUR, if location is leaf; LOCAL_ID, if location is at aggregate level.
Partner Company ID	Trading partner's company ID.	Global_company_id
Partner Location ID	Trading partner's location ID.	Trading Partner Location ID.
Global Item Number	The product's ID.	Format: Numeric or alphanumeric. The default or mapped value of the Product ID.
Local Item Number	The product's Local Item Number.	Format: Numeric or alphanumeric. The value of the Local Item Number.
Unit of Measure	The unit of measure used for products in the data stream.	Unit of Measure of the product can be one of the numeric constants below, or Base Units, as defined for the product. 2 = Stat Units 3 = Currency 4 = Loads
Period Begin	The data stream's start date of beginning time period.	Format: YYYYMMDD
Period End	The data stream's end date of the ending time period.	Format: YYYYMMDD
Quantity	The data stream value.	Numeric value
Data Stream Type Code	The type code or name of the Data Stream Type	Format: numeric or alphanumeric. Default or mapped value of the Data Stream Type Code. For specifying the data stream type name, user has to configure the stream type name through Data Stream mapping utility through configuration.
Data Stream Item Type Code	The Item type code or name of the Data Stream Item Type	Format: numeric or alphanumeric. Default or mapped value of the Data Stream Item Type Code. For specifying the data stream Item type name, user has to configure the stream item type name through Data Stream mapping utility through configuration.
Reason Code	Reason associated with the Data Stream comment	Format: numeric
Comment	Comment associated with the data stream record	Format: numeric/alphanumeric comment value.

Table A-10 (Cont.) Stream Extractor Field Definitions

Column	Description	Value
User Name	User who created/updated the data stream value	User Name value
Source Code	Source of data stream value in the database. i.e., Loaded through integrator, manually created, created by and any other feature like Promotions, etc.	Format: Up to 2 numeric characters
Creator Company ID Type	The ID Type for the company that created data for the stream.	
Creator Company Alternate ID	The Alternate ID of the company that created data for the stream.	
Creator Company Alternate ID Type	The Alternate ID Type of the company that created data for the stream.	
Creator Location ID Type	The Location ID Type of the creator company.	
Creator Location Alternate ID Type	The Alternate ID Type of the creator location.	
Partner Company ID Type	Your trading partner's ID Type.	
Partner Company Alternate ID	Your trading partner's Alternate ID for the company.	
Partner Company Alternate ID Type	Your trading partner's Alternate ID Type of company.	
Partner Location ID Type	Your trading partner's location ID Type.	
Partner Location Alternate ID	Your trading partner's Alternate Location ID.	
Partner Location Alternate ID Type	Your trading partner's Alternate ID Type for the Location.	
Global Item Number Type	The product's ID Type.	
Local Item Number Type	The product's Local Item Number Type.	

Table A-10 (Cont.) Stream Extractor Field Definitions

Column	Description	Value
Revision Status	The status of revision data.	0 = None
		1 = New
		2 = Acknowledged
		3 = Accepted
		4 = Rejected
		5 = Superseded
Creator Role	Creator's role code.	1 = Seller
		2 = Buyer

Sample Stream Extractor File

20010205000000 |10-124-1107 |10-124-1107-0001 |30-333-3333 |30-333-3333-0001
 |0125468712 |20020325 |20020331 |5.25 | 0 |2

Aggregate Stream Loader

The template file for the Aggregate Stream Loader is `AggregateStream.template`.

Note: The streams you wish to load data for must first be assigned to the company before you attempt to load the data.

The Aggregate Stream Loader treats measure streams differently than balance streams or movement streams. Measure streams are loaded into the aggregate table as is without disaggregation. The creation date used for a measure stream is the system day and date.

If you load non-measure stream aggregate data, the data is automatically disaggregated. To view the data at the aggregate level, you must run the Process Aggregate task through the VCC Scheduler.

If the creator company is non-local, you cannot load aggregate data for measure streams.

Note: If the same record exists in two different data files in the same load, it is treated as a duplicate record.

While loading aggregate data, if the creator company is local, partner location is at aggregate level, and if the partner company is not the same as creator company, then you will get the following message:

```

    //Line(1)
    // errorcode = 0-10-172-475 message: Partner company is not the same as
    creator company. details: Partner company: DUNS number is not the same as creator
    company DUNS number
    
```

Loading Aggregate data in converted units (custom UOM) is allowed only if the Product dimension is a leaf. If a custom UOM is provided, then LIN, GIN Type, LIN Type will be ignored.

If the Local ID of a folder is the same as a Leaf ID, then the data will be loaded into the folder.

The Aggregate Stream Loader allows you disaggregate quantities that are at the aggregate context level; the Current Aggregate Stream extractor allows you to extract aggregates. The validation rules for this parser are described in “Integrator Validation Rules”.

Aggregate Stream Loader Rules

Rules to remember when using either the Aggregate Stream Loader or the Leaf Stream Loader:

- While loading custom UOM data on leaf product LIN,LIN Type and GIN Type will be ignored.
- Other GIn and Other UOM are case sensitive.
- If there is any file group collision problem then the job will be aborted without parsing any data files.
- <File name>.502.missing file carries both GIN and LIN even if any one is not found.
- <File name>.503.missing file carries both local Global Id and Alternate Id even if any one is not found.
- <File name>.504.missing file carries both Partner local Global Id and Alternate Id even if any one is not found.
- If the local id of the folder is same as leaf id then the aggregate loader considers folder dimension for loading the data.

The Aggregate Stream Loader also allows you to aggregate on a time only basis taking data that are based on a weekly schedule and aggregating it into daily data. This allows you to collaborate with partners who forecast on a daily basis. This feature is available only if your forecasts are based on daily time periods. If you are loading a time-only aggregation data, and all contexts are at the leaf level, the time period context must be a weekly time period.

Although the table below depicts both Context and Period at aggregate levels, they are not required to be. Either Context, Period, or both can be at an aggregate level. Different modes of aggregate loading are shown in the figures below.

<i>profile</i>	Profile
<i>straightline</i>	StraightLine
<i>proportional</i>	Proportional
<i>begin/end</i>	Begin/End
	Not Allowed

Accumulation Rule	DisAggregation Factors	UI Aggregate On				Dataload Aggregate On			
		Context	Period		Context	Period			
			Wk->Day	Other->Day		Wk->Day	Other->Day		
Movement	Stored	<i>profile</i>	<i>profile</i>		<i>profile</i>	<i>profile</i>			
	Dynamic	<i>proportional</i>	<i>proportional</i>	<i>proportional</i>	<i>straightline</i>	<i>straightline</i>	<i>straightline</i>		
Balance	Stored	<i>profile</i>	<i>begin/end</i>		<i>profile</i>	<i>begin/end</i>			
	Dynamic	<i>proportional</i>	<i>begin/end</i>		<i>straightline</i>	<i>begin/end</i>			

If you assume that Context is at aggregate level and Period is at leaf level, as shown in the table below, it is as if the Period column.

Accumulation Rule	DisAggregation Factors	UI Aggregate On		Dataload Aggregate On	
		Context		Context	
Movement	Stored	profile		profile	
	Dynamic	proportional		straightline	
Balance	Stored	profile		profile	
	Dynamic	proportional		straightline	

Likewise, if the Period is at an aggregate level and Context is at a leaf level, is it as if the Context column did not exist. (seen below).

Accumulation Rule	DisAggregation Factors	UI Aggregate On		Dataload Aggregate On	
		Period		Period	
		Wk->Day	Other->Day	Wk=>Day	Other=>Day
Movement	Stored	profile		profile	
	Dynamic	proportional	proportional	straightline	straightline
Balance	Stored	beginend		beginend	
	Dynamic	beginend		beginend	

The columns you can define for the Aggregate Stream Loader are described in the Table below.

Table A-11 Aggregate Stream Loader Field Definitions

Column	Description	Value	Optional
Creation Date	The creation date of the stream. You cannot load a stream into the current stream table that has a creation date less than or equal to the prev_creation_date. For example, if you loaded a stream with a creation date of 10/30/2001, and the previous date is 10/29/2001, you cannot load a new stream with a date equal to or prior to 10/29/2001. Also note that the creation date is translated into GMT in the database according to the time zone selected.	Format: YYYYMMdd or YYYYMMdd HHmmSS or YYYYMMdd HHmmssSS	No
User Name	The name of the user responsible.	Up to 40 alphanumeric characters..	No
Creator Company ID	The Global Company ID of the company that created the data for the stream.	Up to 40 characters	Yes*
Creator Location ID	The location ID of the company, if it is leaf. Local ID if it is folder.	Up to 40 characters	Yes*
Partner Company ID	Your trading partner's company ID. However, if the partner context contains a folder, this value must be the creator company ID if the creator company is local.	Up to 40 character numeric	Yes*
Partner Location ID	Your trading partner's company Location ID, if it is leaf. Local ID if it is folder.	Up to 40 character numeric.	Yes*
Global Item Number	The product's ID, if it is leaf. Local ID if it is folder.	Up to 40 character alphanumeric.	Yes*
Period Begin	The data stream's beginning time period.	YYYYMMDD	No
Period End	The data stream's ending time period.	YYYYMMDD	No
Quantity	The data stream's quantity.	Numeric	No

Table A-11 (Cont.) Aggregate Stream Loader Field Definitions

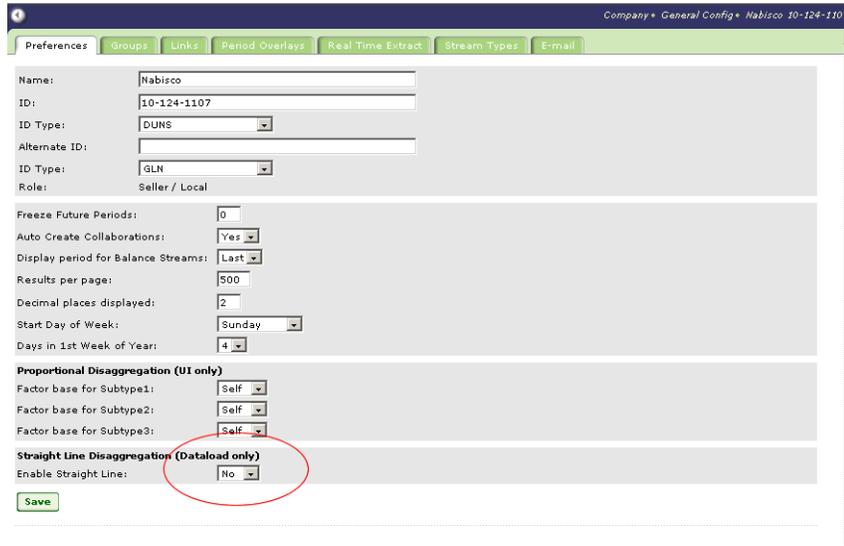
Column	Description	Value	Optional
Data Stream Type Code	The type code you assigned to the data stream when you configured the control file for it.	Type Code	No
Data Stream Item Type Code	The data stream item type code you assigned to the data stream item when you configured the control file for it.	Item Type Code	No
Unit-of-Measure	The UOM type.	- Base UOM - Custom UOM - Can be left blank for Base UOM.	Yes
Creator Company ID Type	The ID Type of the company that created the data for the stream.	Numeric;	Yes
Creator Company Alternate ID	The Alternate ID of the company that created the data for the stream.	Up to 40 characters	Yes*
Creator Company Alternate ID Type	The Alternate ID Type of the company that created the data for the stream.	Numeric	Yes
Creator Location ID Type	The ID Type of the creator company's location.	Numeric.	Yes
Creator Location Alternate ID	The Alternate ID of the creator's location.	Up to 40 characters	Yes*
Creator Location Alternate ID Type	The Alternate ID Type of the creator location.	Numeric	Yes
Partner Company ID Type	Your trading partner's Company ID Type.	Numeric	Yes
Partner Company Alternate ID	Your trading partner's Alternate Company ID.	Up to 40 characters	Yes*
Partner Company Alternate ID Type	Your trading partner's Alternate Company ID Type.	Numeric	Yes
Partner Location ID Type	Your trading partner's Location ID Type.	Numeric.	Yes
Partner Location Alternate ID	Your trading partner's Alternate Location ID.	Up to 40 characters	Yes*
Partner Location Alternate ID Type	Your trading partner's Alternate Location ID Type.	Numeric.	Yes
Global Item Number Type	The product's ID Type.	Numeric.	Yes
Local Item Number	The product's Local Item Number.	Up to 40 characters	Yes*
Local Item Number Type	The product's Local Item Number Type.	Numeric	Yes

*Although marked "Yes" in the Optional column, these fields are conditionally optional, based on whether or not other information has been provided. For more details, see full explanation of [Conditionally Optional Fields](#).

If two disaggregation profiles have common collaboration items, when disaggregation is performed, creation date will be adjusted.

Before you can run the Aggregate Stream Loader, you must create an Aggregate Profile. This can be done using the Client. For details, see “About Aggregate Profiles” in the VCC User Guide.

If you do not want to use an Aggregate Profile to load aggregate data, you must change the default settings in the Client to enable Straight-Line allocation. To do so, select “yes” in the Client’s Company - General Config - Preferences tab, as seen below. This will apply the changes for the whole company.



When loading aggregate data, one dimension from the context must be at the aggregate level. You must identify the dimension at the aggregate level by its folder ID (its local ID in the database).

The validation rules for the Aggregate Stream Loader are as follows:

If Creator Company is Local:

- For the Creator Context
 - If it is a folder, it must belong to the creator company
 - If it is a leaf, it must belong to the creator company
- For the Partner Context
 - If folder, it must belong to the creator company (if partner company is the same as creator, you can validate with partner company as well)
 - If it is a leaf, it must belong to the partner company

If Creator Company is not Local (company.isLocal = 0):

- For the Creator Context
 - If it is a folder, it must belong to the partner company
 - If it is a leaf, it must belong to the creator company
- For the Partner Context
 - If folder, it must belong to the partner company

- If it is a leaf, it must belong to the partner company
- For the Product Context
 - If it is a folder, it must belong to the partner company
 - If it is a leaf, it must belong to the partner company

Table A–12 Creator DUNS Validation Rules

Creator Company	Location Context Level	Partner Company	Partner Context Level
Local Creator Company			
Local Company DUNS	Leaf	Local Company DUNS	Folder
Local Company DUNS	Folder	Partner Company DUNS	Leaf
Local Company DUNS	Folder	Local Company DUNS	Folder
Non- Local Creator Company			
Non-Local Company DUNS	Leaf	Local Company DUNS	Folder
Non-Local Company DUNS	Folder	Local Company DUNS	Leaf
Non-Local Company DUNS	Folder	Local Company DUNS	Folder

Sample Aggregate Datafile

//If the creator company (111) is Local, then use the creator company DUNS number as the partner company DUNS number when the partner location is at the folder level

Context Comments Loader/Extractor

The Context Comments Extractor operates real-time, saving a context comment file to ~\server\realtimeextract\contextcomments each time a context comment is entered. No configuration is required.

The Context Comment Loader allows you to load comments extracted from a remote system. This loader/extractor uses a fixed XML format.

Exception Loader/Extractor

The template control file for the Exception loader is Exception.template.

The Exception loader/extractor allows you to load exceptions in bulk format or extract exceptions from the database. The validation rules for this parser are described in "Integrator Validation Rules". The fields you can define for the Exception loader are :

Table A–13 Exception Loader/Extractor Table

Default	Column	Description	Possible Value
1	Creator Company ID	Creator Company	Format: DUNS Creator's Global Company ID / Creator Folders
2	Creator Location ID	Creator Location	Format: DUNS+4 Creator's Global Location ID / Local ID

Table A-13 (Cont.) Exception Loader/Extractor Table

Default	Column	Description	Possible Value
3	Partner Company ID	Partner Company	Format: DUNS Partner's Global Company ID
4	Partner Location ID	Partner Location	Format: DUNS+4 Partner's Global Location ID / Partner Folder's Local ID
5	Global Item Number	Product Item	Format: GIN Product GIN / Product folder's Local ID.
6	Period Begin	Beginning of the Active Period.	DATE
7	Period End	Ending of the Active Period.	DATE
8	User Name	User that creates Read-Only Exception.	Format: String; ANY User Name
9	Base Is Local	Is Base value Local or Partner.	0 / "False" = Partner 1 / "True" = Local
10	Base Type Code	Base value stream type.	Specify a numeric constant or a string constant.
11	Base Item Type Code	Creator Company's specific Stream Item Type.	Specify a numeric constant or a string constant.
12	Comparison Value Type	One of the Comparison Types (see Possible Values).	Specify a numeric or a string constant: 1 = "Current" 2 = "Previous" 3 = "Gen_Offset" 4 = "Per_Offset" 5 = "Threshold"
13	Comp Is Local	Is Partner Company Local (0 / "False") or Partner (1 / "True").	0 / "False" = Local 1 / "True" = Partner
14	Comp Type Code	Partner Company's specific Stream Type	Specify a numeric constant or a string constant.
15	Comp Item Type Code	Partner Company's specific Stream Item Type.	Specify a numeric constant or a string constant.
16	Offset	Generation Offset value or Period Offset value.	Numeric
17	Absolute Variance	Absolute Variance value.	Numeric
18	Percent Variance	Percent Variance value.	Numeric

Table A-13 (Cont.) Exception Loader/Extractor Table

Default	Column	Description	Possible Value
19	Severity Level	Severity Level of this Exception.	Specify a numeric or a string constant: 2 = "High" 1 = "Med" 0 = "Low"
20	UOM Type	Unit-of-Measure (see Possible Value).	Specify a numeric or a string constant: 1 = "BaseUnits" 2 = "StatFactor" 3 = "Currency" 4 = "Load"
21	Quantity 1	Quantity	Numeric
22	Quantity 2	Partner Company Quantity	Numeric
23	Resolution Code	Null or one of the Resolution Codes in addition to Comment.	Format: Numeric or Null. 1 = Local issue: changed value 2 = Partner issue: changed value 3 = Local issue: value unchanged 4 = Partner issue: value unchanged 5 = Split the difference 6 = New collaborative value 7 = Agreed to disagree 8 = Obsolete value 9 = Not resolved
24	Comment	Comments for this Exception, in addition to Resolution Code.	Format: Up to 100 characters.
25	Creation Date	Date when the exception was triggered.	DATE / DATETIME
26	Status	Exception Status.	Format: Numeric. 0 = Active 1 = In Process 2 = Auto In Process 3 = Supersedes 4 = Escalated 5 = Auto Escalated 6 = Auto Incomplete
27	IsSelf Aggregate	Indicates whether "Sum" on folder or "Any" on folder.	0 = "False" 1 = "True"
28	IsPart Aggregate	Indicates whether "Sum" on folder or "Any" on folder.	0 = "False" 1 = "True"

Table A-13 (Cont.) Exception Loader/Extractor Table

Default	Column	Description	Possible Value
29	IsProd Aggregate	Indicates whether "Sum" on folder or "Any" on folder.	0 = "False" 1 = "True"

Comparison Types (accompanied by a Numeric Value in the "Comparison Value Type" Column) are "Current to Current" = 1 ; "Current to Previous" = 2 ; "Current to Generational Offset" = 3 ; "Current to Period Offset" = 4 ; "Current to Threshold" = 5.

Resolution Codes (accompanied by Value in the "Resolution Code" Column): "Local issue: Changed Value" = 1 ; "Partner issue: Changed Value" = 2 ; "Local issue: Value Unchanged" = 3 ; "Partner issue: Value Unchanged" = 4 ; "Split the difference" = 5 ; "New collaborative value" = 6 ; "Agreed to disagree" = 7 ; "Obsolete value" = 8 ; "Not resolved" = 9.

Rules:

1. If the Comparison Type chosen (Column #12) is "Current to Threshold", Columns 13, 14, and 15 are not needed.
2. If the Comparison Type chosen (Column 12) is not "Generational Offset" or "Period Offset", Column 16 is not needed.
3. "Resolution Code" and "Comment" (Columns 23 and 24) are Optional.
4. "Is Self Aggregate", "IsPart Aggregate", and "IsProd Aggregate" columns only need to be specified when Location IDs are specified in the Creator Location ID, Partner Location ID, and Product Location ID columns.

Exception Criteria Loader/Extractor

The Exception Criteria Extractor allows you to extract exception criteria in bulk format, and the Exception Criteria Loader allows you to load the net change of criteria that were extracted from a remote system, including both adds and deletes. This loader/extractor uses a fixed XML format described in `SyncraIntegrationTypesExcpCrit.xsd`. For more details on each field, refer to defining exception criteria.

Price Profiles Loader/Extractor

The template control file for the Price Profiles loader is `PriceProfiles.template`.

The Product Profile loader/extractor allows you to load or extract product profiles (base prices). The fields allowed in the Price Profile Loader/Extractor are described in the Table below.

Table A-14 Price Profiles Loader/Extractor

Column	Description	Value
Creator Company ID	The ID of the company that created the data for the stream.	Up to 40 characters
Creator Location ID	The location ID of the company.	Up to 40 characters
Partner Company ID	Your trading partner's company ID.	Up to 40 characters
Partner Location ID	Your trading partner's location ID.	Up to 40 characters

Table A-14 (Cont.) Price Profiles Loader/Extractor

Column	Description	Value
Global Item Number	The product's ID.	Up to 40 character alphanumeric
Period Begin	The data stream's beginning time period.	YYYYMMDD
Period End	The data stream's ending time period.	YYYYMMDD
Base price	The product's base price.	Numeric
User Name	The user associated with this price profile.	Up to 40 characters

The validation rules for this parser are described in "Integrator Validation Rules".

Sample Profile Datafile

10-124-1107,10-124-1107-0001,30-333-3333,30-333-3333-0001,0125468712,20010625,20010701,10.00,Dave Wilson

10-124-1107,10-124-1107-0001,30-333-3333,30-333-3333-0001,0125468712,20010702,20010708,20.00,Dave Wilson

10-124-1107,10-124-1107-0001,30-333-3333,30-333-3333-0001,0125468712,20010709,20010715,30.00,Dave Wilson

10-124-1107,10-124-1107-0001,30-333-3333,30-333-3333-0001,0125468712,20010716,20010722,40.00,Dave Wilson

Events Loaders

The VCC client allows you to create individual promotions one at a time. However, promotions can also be bulk loaded through the Events Loaders, as well as extracted from the database using the Events Extractor. The event promotions bulk load file must be in XML format to be read by the VCC Integrator.

Before you can load or extract Events, you must configure a control file describing the template name file. The control file description includes the XML file location, character set, Time Zone, etc. A sample XML file can be found in the Syncra_home/integrator directory, in addition to the Event status loader sample file, also in XML format.

The fields that are available for Events Loaders and Extractors are described in the following tables.

Note that Events Extractors no longer need to be configured using Extractor configuration. Properties are picked up from the format file directly.

Note: Event Loader data file has a fixed date format (YYYY-MM-DD) for all dates provided in the data file.

There are three types of Event Loaders:

- Events Loader
- Event Stream Set Loader

- Promotion Status Loader

Events Loader

Uses the Event.template

Creating Events

If the event ID does not already exist, the incoming data will be added to the database. Be aware that loading data with erroneous ID values may lead to duplicate event creation.

Editing Events

If an event ID already exists, new values will replace existing values. VCC detects that an event is being edited, and will replace existing values when:

1. any promotion items are provided
2. the "Set Impacts" flags are set

AND

3. the promotion status indicates impacts have been applied to forecasts

If the above conditions are met, the promotional forecasts for the promotion items that were previously associated with the event will be restated (i.e. new forecasts will be calculated for the promotion items that were loaded). Existing promotion items that do not match the new set will be deleted, and any items in the event load that did not already exist will be created.

Note: When Loading Events Created By Non-Local Companies, that Event can contain promotions for only one partner company. If it contains promotions for more than one the entire Event will be rejected.

Status updates are processed through a separate XML file. See "[Promotion Status Loader](#)".

For the Event and Promotion Status Loaders, Language encoding is not available from the Loader configuration, but can be specified by editing the following line in the xml file:

```
<?xml version="1.0" encoding="UTF-8" ?>
```

Note: If an Event is being edited using the UI, then the user should not load the same Event in Edit operation in order to avoid data discrepancy.

The fields you can define for the Events and Status Loaders are at:

Event Level

Promotion Level

Event Item Level

Table A-15 Event -Level Events and Status Loader Field Definitions

Element	Description	Value	Optional
Event Category	Event Category from the pre-defined set of Categories	The event category name (Assortment Change, Community Promotion, Disaster, Freight Flow Allocation, Holiday, Inventory Policy Change, Joint Promotion, Labor, Location Closing, Location Opening, Manufacturer Promotion, Other NonPromotional, Other Promotional, Packaging Labeling Change, Price Change, Product Discontinuation, Product Introduction, Retailer Promotion, Seasonal Event, Store Closing Event, Store Format Change, Store Opening Event, Test Market, or Weather).	No
Description	User entered Event Description	Format: Up to 650 alphanumeric characters	Yes
EventId	Unique Event identifier	Format: Up to 80 alphanumeric characters	No
Name	Event Name	Format: Up to 60 alphanumeric characters	No
SetOrder Impact	Flag to set the Order impacts	Format: 0 or 1, True Or False	No
SetSalesImpact	Flag to set the Sales Impacts	Format: 0 or 1, True Or False	No
Streamset	Name of the stream set used by the Event	User-defined streamset name.	No
url	URL at Event level	URL not to exceed more than 650 characters.	Yes
Gln Identification Type	Company Id Type from the pre-defined set of Company id Types	Actual ID Type name.	No
Idn	Company Id	Format: Up to 30 alphanumeric characters	No
Timeframe Begin	Event Begin Date	Format: YYYY-MM-DD	No
Timeframe End	Event End Date	Format: YYYY-MM-DD	No
username	Name of the user creating/editing the Event, this user always belong to the company Id at Event level	Format: Up to 30 alphanumeric characters	No
LastModified Date	Date when the Event is created or Last Modified. Extractor only.	Format: YYYY-MM-DD	Yes
Comment	Event level comments	Format: Up to 200 alphanumeric characters	Yes

Table A-16 Promotion-Level Event and Status Loader Field Definitions

Element	Description	Value	Optional
Email	Email address separated by semicolon	Format: Up to 1250 alphanumeric characters	Yes
emailLanguage	Language used for email contents to send the email	Format: Please check the Language for the appropriate formats. For American English the standard format is en_US	No
EntireEvent	Flag to disaggregate Promo Sales Impact Qty for periods across Items	Format: 0 or 1, "true" or "false".	No
PartnerPromoId	Promotion ID defined by partner	Format: Up to 65 alphanumeric characters	Yes
PriceImpactType	Type used for computing Promotional Price Impacts. When Set Sales Impact is set to "1", this field is required.	Absolute Increase, Absolute Decrease, Set Value to, Percent Increase, Percent Decrease.	No
PriceImpactValue	Value used for computing Promo Price Impacts. When Set Sales Impact is set to "1", this field is required.	Number not to exceed 15 digits.	No
PromotionId	Unique Promotion Identifier	Format: Up to 80 alphanumeric characters	No
SalesImpactType	Type used for computing Promotional Sales Impacts. When Set Sales Impact is set to "1", this field is required.	Absolute Increase, Absolute Decrease, Set Value to, Percent Increase, Percent Decrease.	No
SalesImpactValue	Value used for computing Promo Sales Impacts. When Set Sales Impact is set to "1", this field is required.	Number not to exceed 15 digits.	No
Status	Current status of the promotion. (For extractor only, this is not used to change the Promotion Status-- to change the Promotion Status use Promo Status Loader.)	Actual status name.	No (Promo Status Loader) Yes (Event Loader)
url	URL at Promotion level	Format: Up to 650 alphanumeric constants	Yes
Gln Identification Type	Company Id Type from the pre-defined set of Company id Types	Actual various identification type.	No
Idn	Partner Company Id	Format: Up to 30 alphanumeric characters	No
FirstAvailableDate	Date of first availability of the shipment	Format: YYYY-MM-DD	Yes

Table A-16 (Cont.) Promotion-Level Event and Status Loader Field Definitions

Element	Description	Value	Optional
username	Name of the user creating/editing the Event, this user always belong to the company Id at Event level	Format: Up to 30 alphanumeric characters	No
LastModifiedDate	Date when the Event is created or Last Modified. Extractor only.	Format: YYYY-MM-DD	Yes
User defined1	User entered alphanumeric characters	Format: Up to 650 alphanumeric characters	Yes
User defined2	User entered alphanumeric characters	Format: Up to 650 alphanumeric characters	Yes
dcPromoOrderForecastOffset	DC Order forecast offset	Format: Integer	Yes
forwardBuyForecastOffset	Forward Buy Forecast Offset	Format: Integer	Yes
dsdPromoOrderForecastOffset	DSD Order Forecast Offset	Format: Integer	Yes
Milestone date	Milestone due date	Format: YYYY-MM-DD	Yes
Notification offset	Offset to notify milestone status	Format: Integer	Yes
Milestone status	Milestone status, Proposed, Planned, Active, Completed	Actual status name.	Yes
Tactic Component	Tactics Component	Actual tactic component name.	Yes
ComponentType	Tactic	Actual component type name.	Yes
UOM	Tactics UOM	Format: alphanumeric; not to exceed 35 characters.	Yes
Value	Tactics value	Format: Integer	Yes
Begin	Tactic Begin Date	Format: YYYY-MM-DD	Yes
End	Tactics End Date	Format: YYYY-MM-DD	Yes
Comment user	Username who added the Promotion level threaded comment	Format: Up to 30 alphanumeric characters	Yes
Idn	Company Id, user belongs to who is creating the comment	Format: Up to 30 alphanumeric characters	Yes
Company Id Identification Type	Company Id Type from the pre-defined set of Company id Types	Format: alphanumeric; actual ID type name.	Yes
Comment text	Threaded comment text at Promotion Level. Comments at Promotion Level contain dates in the YYYY-MM-DD hh:mm:ss format. All other Dates will be in YYYY-MM-DD format.	Format: Up to 75 alphanumeric characters	Yes

Table A-16 (Cont.) Promotion-Level Event and Status Loader Field Definitions

Element	Description	Value	Optional
CreationDate	Date when the Comment is created	Format: YYYY-MM-DD hh:mm:ss	Yes

Table A-17 Event Item-Level Events and Status Loader Field Definitions

Element	Description	Value	Optional
Dc Promo Order Forecast Qty	DC Order Forecast Quantity	Format: Up to 15 Numbers	Yes
Dsd Promo Order Forecast Qty	DSD Promo Order Forecast Qty	Format: Up to 15 Numbers	Yes
Forward Buy Forecast Qty	Forward Buy Forecast Quantity	Format: Up to 15 Numbers	Yes
Item Type	Type of the Item from the set of pre-defined two Item types	Actual item type name.	No
PriceImpact Type	Type used for computing Promotional Price Impacts.	Absolute Increase, Absolute Decrease, Set Value to, Percent Increase, Percent Decrease.	Yes
PriceImpact Value	Value used for computing Promo Price Impacts	Number; not to exceed 15 digits.	Yes
PromotionItem Id	Item Identifier , this is unique with a given Promotion and Event	Format: Format: Up to 80 alphanumeric characters	No
SalesImpact Type	Type used for computing Promotional Sales Impacts.	Absolute Increase, Absolute Decrease, Set Value to, Percent Increase, Percent Decrease.	Yes
SalesImpact Value	Value used for computing Promo Sales Impacts	Number; not to exceed 15 digits.	Yes
Local idn	Creator Location ID	Format: Up to 80 alphanumeric characters	No
Partner idn	Partner Location Id	Format: Up to 80 alphanumeric characters	No
Product idn	Global Item Number	Format: Up to 80 alphanumeric characters	No
Period Begin	Item Begin period	Format: YYYY-MM-DD	No
Period End	Item End Period	Format: YYYY-MM-DD	No
Participating Locations	Number of store level locations	Format: Integer	Yes

Sample Events Loader XML File

```
<?xml version="1.0" encoding="ASCII" ?> <syncraTransaction>
<version value="1.0"/>
<event category="Assortment Change" description="Test Loader Extractor"
  eventId="SYNCRA_183" name="TestLoad/Extract" setOrderImpact="true"
  setSalesImpact="true" streamset="New" url="http://www.EventURL.com">
```

```

<creator>
  <gln identificationType="DUNS" idn="12345creatorcomp"/>
</creator>
<timeFrame begin="2003-10-07" end="2003-10-08"/>
<user>
  <username>user12</username>
</user>
<lastModifiedDate>2003-10-15</lastModifiedDate>
<comment>Test Loader Extractor</comment>
<promotionList>
  <promotion email="reciever1@company.com;reciever2@company2.com"
    emailLanguage="en_US" entireEvent="0"
    partnerPromoID="Partner_Promo"
    priceImpactType="Percent Decrease" priceImpactValue="5.75"
    promotionId="SYNCRA_185" salesImpactType="Absolute Increase"
    salesImpactValue="75.0" status="New" url="http://www.PromoURL.com">
    <partner>
      <gln identificationType="DUNS" idn="12345partnercomp"/>
    </partner>
    <firstAvailableDate>2003-10-15</firstAvailableDate>
    <user>
      <username>12345creatorcomp_user</username>
    </user>
    <lastModifiedDate>2003-10-15</lastModifiedDate>
    <userDefined1>User Defined #1</userDefined1>
    <userDefined2>User Defined #2</userDefined2>
    <orderOffsetList>
      <dcPromoOrderForecastOffset>0</dcPromoOrderForecastOffset>
      <forwardBuyForecastOffset>0</forwardBuyForecastOffset>
      <dsdPromoOrderForecastOffset>0</dsdPromoOrderForecastOffset>
    </orderOffsetList>
    <dueDateList>
      <milestone date="2003-10-05" notificationOffset="1" status="Proposed"/>
    <milestone date="2003-10-06" notificationOffset="1" status="Planned"/>
      <milestone date="2003-10-07" notificationOffset="1" status="Active"/>
      <milestone date="2003-10-08" notificationOffset="1" status="Completed"/>
    </dueDateList>
  </promotion>
</promotionList>

```

```
<tacticList>
  <tactic component="Ad" componentType="Billboard"
    uom="11u" value="1.0">
    <dates begin="2003-10-15" end="2003-10-16"/>
  </tactic>
  <tactic component="Ad" componentType="Direct Mail Ad"
    uom="22u" value="2.0">
    <dates begin="2003-10-17" end="2003-10-18"/>
  </tactic>
  <tactic component="Ad"
    componentType="Direct Mail Blow-In" uom="33u" value="3.0">
    <dates begin="2003-10-19" end="2003-10-20"/>
  </tactic>
</tacticList>
<commentList>
  <comment>
    <user>
      <username>12345partnercomp_user</username>
      <gln identificationType="DUNS" idn="12345partnercomp"/>
    </user>
    <commentText>This comment is posted by 12345partnercomp_
user.</commentText>
    <creationDate>2003-10-07 04:00:01</creationDate>
  </comment>
  <comment>
    <user>
      <username>12345creatorcomp_user</username>
      <companyid identificationType="DUNS" idn="12345creatorcomp"/>
    </user>
    <commentText>This comment is posted by 12345creatorcomp_
user</commentText>
    <creationDate>2003-10-07 04:00:02</creationDate>
  </comment>
</commentList>
<itemList>
  <item dcPromoOrderForecastQuantity="101.0"
    dsdPromoOrderForecastQuantity="202.0"
    forwardBuyForecastQuantity="303.0"
```

```

        itemType="Cannibalized"
        priceImpactType="Absolute Decrease"
        priceImpactValue="5.75"
        promotionItemId="SYNCRA_2291"
        salesImpactType="Absolute Increase" salesImpactValue="75.0">
        <context>
            <local idn="12345creatorcomp_location"/>
            <partnerL idn="12345partnercomp_location"/>
            <product idn="Newproduct_GIN"/>
        </context>
        <period begin="2003-10-07" end="2003-10-08"/>
        <participatingLocations>0</participatingLocations>
    </item>
    <item dcPromoOrderForecastQuantity="101.0"
        dsdPromoOrderForecastQuantity="202.0"
        forwardBuyForecastQuantity="303.0"
        itemType="Cannibalized"
        priceImpactType="Absolute Decrease"
        priceImpactValue="5.75"
        promotionItemId="SYNCRA_2291"
        salesImpactType="Absolute Increase" salesImpactValue="75.0">
        <context>
            <local idn="12345creatorcomp_location11"/>
            <partnerL idn="12345partnercomp_location11"/>
            <product idn="Newproduct_GIN11"/>
        </context>
        <period begin="2003-10-07" end="2003-10-08"/>
        <participatingLocations>0</participatingLocations>
    </item>
</itemList>
</promotion>
<promotion email="reciever3@company.com;reciever4@company2.com"
    emailLanguage="en_US" entireEvent="1"
    partnerPromoID="Partner_Promo"
    priceImpactType="Percent Decrease" priceImpactValue="8.75"
    promotionId="SYNCRA_185" salesImpactType="Absolute Increase"
    salesImpactValue="705.0" status="New" url="http://www.PromoURL.com">

```

```
<partner>
  <gln identificationType="DUNS" idn="12345partnercomp"/>
</partner>
<firstAvailableDate>2003-10-15</firstAvailableDate>
<user>
  <username>12345creatorcomp_user</username>
</user>
<lastModifiedDate>2003-10-15</lastModifiedDate>
<userDefined1>User Defined #1</userDefined1>
<userDefined2>User Defined #2</userDefined2>
<orderOffsetList>
  <dcPromoOrderForecastOffset>0</dcPromoOrderForecastOffset>
  <forwardBuyForecastOffset>0</forwardBuyForecastOffset>
  <dsdPromoOrderForecastOffset>0</dsdPromoOrderForecastOffset>
</orderOffsetList>
<dueDateList>
  <milestone date="2003-10-05" notificationOffset="1" status="Proposed"/>
<milestone date="2003-10-06" notificationOffset="1" status="Planned"/>
  <milestone date="2003-10-07" notificationOffset="1" status="Active"/>
  <milestone date="2003-10-08" notificationOffset="1" status="Completed"/>
</dueDateList>
<tacticList>
  <tactic component="Ad" componentType="Billboard"
    uom="11u" value="1.0">
    <dates begin="2003-10-15" end="2003-10-16"/>
  </tactic>
  <tactic component="Ad" componentType="Direct Mail Ad"
    uom="22u" value="2.0">
    <dates begin="2003-10-17" end="2003-10-18"/>
  </tactic>
  <tactic component="Ad"
    componentType="Direct Mail Blow-In" uom="33u" value="3.0">
    <dates begin="2003-10-19" end="2003-10-20"/>
  </tactic>
</tacticList>
<commentList>
  <comment>
```

```

    <user>
      <username>12345partnercomp_user</username>
      <companyid identificationType="DUNS" idn="12345partnercomp"/>
    </user>
    <commentText>This comment is posted by 12345partnercomp_
user.</commentText>
    <creationDate>2003-10-07 04:00:01</creationDate>
  </comment>
<comment>
  <user>
    <username>12345creatorcomp_user</username>
    <companyid identificationType="DUNS" idn="12345creatorcomp"/>
  </user>
  <commentText>This comment is posted by 12345creatorcomp_
user</commentText>
  <creationDate>2003-10-07 04:00:02</creationDate>
</comment>
</commentList>
<itemList>
  <item dcPromoOrderForecastQuantity="101.0"
    dsdPromoOrderForecastQuantity="202.0"
    forwardBuyForecastQuantity="303.0"
    itemType="Cannibalized"
    priceImpactType="Absolute Decrease"
    priceImpactValue="5.75"
    promotionItemId="SYNCRA_2291"
    salesImpactType="Absolute Increase" salesImpactValue="75.0">
    <context>
      <local idn="12345creatorcomp_location01"/>
      <partnerL idn="12345partnercomp_location01"/>
      <product idn="Newproduct_GIN01"/>
    </context>
    <period begin="2003-10-07" end="2003-10-08"/>
    <participatingLocations>0</participatingLocations>
  </item>
  <item dcPromoOrderForecastQuantity="101.0"
    dsdPromoOrderForecastQuantity="202.0"
    forwardBuyForecastQuantity="303.0"

```

```

        itemType="Cannibalized"
        priceImpactType="Absolute Decrease"
        priceImpactValue="5.75"
        promotionItemId="SYNCRA_2291"
        salesImpactType="Absolute Increase" salesImpactValue="75.0">
    <context>
        <local idn="12345creatorcomp_location02"/>
        <partnerL idn="12345partnercomp_location02"/>
        <product idn="Newproduct_GIN02"/>
    </context>
    <period begin="2003-10-07" end="2003-10-08"/>
    <participatingLocations>0</participatingLocations>
</item>
</itemList>
</promotion>
</promotionList>
</event>
</syncraTransaction>

```

Event Stream Set Loader

Uses the EventStreamSet.template

The fields you can define for the Event Stream Set Loader are:

Table A-18 Event Stream Set Loader Field Definitions

Column	Description	Value	Optional
Name	Stream set name	Format: up to 20 alphanumeric characters	No
Creator Company ID	Creator Company ID, for which the stream set is being created/edited	Format: DUNS: up to 40 characters	No
Base Sales Forecast Stream Type	Base sales forecast stream type code	Format: up to 10 numbers	No
Base Sales Forecast Stream Item Type	Base sales forecast stream item type code	Format: up to 10 numbers	No
Base Sales Forecast Stream Is Local	Creator is local or partner	0, 1	No
Base Sales Forecast Stream Enable Totals	Enable Totals for Base Sales Forecast Stream	0, 1	No

Table A-18 (Cont.) Event Stream Set Loader Field Definitions

Column	Description	Value	Optional
Promo Sales Forecast Stream Type	Promo sales forecast stream type code	Format: up to 10 numbers	No
Promo Sales Forecast Stream Item Type	Promo sales forecast stream item type code	Format: up to 10 numbers	No
Promo Sales Forecast Event Stream Enable Totals	Enable totals for Promo Sales Forecast Event Stream	0, 1	No
Actual Sales Stream Type	Actual sales forecast stream type code	Format: up to 10 numbers	No
Actual Sales Stream Item Type	Actual sales forecast stream item type code	Format: up to 10 numbers	No
Actual Sales Stream Is Local	Creator is local or partner	0, 1	No
Actual Sales Stream Enable Totals	Enable totals for Actual Sales Stream	0, 1	No
DC Order Forecast Stream Type	DC Order Forecast Stream Type code	Format: up to 10 numbers	Yes
DC Order Forecast Stream Item Type	DC Order Forecast Stream Item Type code	Format: up to 10 numbers	Yes
DC Order Forecast Stream Enable Totals	Enable Totals for DC Order Forecast Stream	0, 1	Yes
DSD Order Forecast Stream Type	DSD Order Forecast Stream Type code	Format: up to 10 numbers	Yes
DSD Order Forecast Stream Item Type	DSD Order Forecast Stream Item Type code	Format: up to 10 numbers	Yes
DSD Order Forecast Stream Enable Totals	Enable Totals for DSD Order Forecast Stream	0, 1	Yes
Forward Buy Forecast Stream Type	Forward Buy Forecast Stream Type code	Format: up to 10 numbers	Yes
Forward Buy Forecast Stream Item Type	Forward Buy Forecast Stream Item Type code	Format: up to 10 numbers	Yes
Forward Buy Forecast Stream Enable Totals	Enable Totals for Forward Buy Forecast Stream Item Type	0, 1	No
On-Hand Inventory Stream Type	On-Hand Inventory Stream Type code	Format: up to 10 numbers	Yes

Table A-18 (Cont.) Event Stream Set Loader Field Definitions

Column	Description	Value	Optional
On-Hand Inventory Stream Item Type	On-Hand Inventory Stream Item Type code	Format: up to 10 numbers	Yes
On-Hand Inventory Stream Is Local	Creator is local or partner	0, 1	Yes
On-Hand Inventory Stream Enable Totals	Enable Totals for On-Hand Inventory Stream	0, 1	Yes
Monetary Sales Stream Type	Monetary Sales Stream Type code	Format: up to 10 numbers	Yes
Monetary Sales Stream Item Type	Monetary Sales Stream Item Type code	Format: up to 10 numbers	Yes
Monetary Sales Stream Is Local	Creator is local or partner	0, 1	Yes
Monetary Sales Stream Enable Totals	Enable Totals for Monetary Sales Stream	0, 1	Yes
Cross Dock Order Stream Type	Cross Dock Order Stream Type code	Format: up to 10 numbers	Yes
Cross Dock Order Stream Item Type	Cross Dock Order Stream Item Type code	Format: up to 10 numbers	Yes
Cross Dock Order Stream Enable Totals	Enable Totals for Cross Dock Order	0, 1	Yes

Promotion Status Loader

The template control file for the Promotion Status Loader is PromoStatus.template. See [“Events Loader”](#) for field definitions in the Promotion Status Loader. The Promotion Status Loader contains the following fields:

- Event ID
- Promotion ID
- Company ID (Company ID of the “User”)
- User
- Status
- Comment (Promotion Level, threaded comment) — the value for this field can be null (optional).

Metrics Loader/Extractor

The template control file for the Metrics Loader is Metric.template.

The fields you can define for the metrics loader/extractor are:

Table A-19 Metrics Loader/Extractor Field Definitions

Column	Description	Value
Creator Company ID	The company ID of the creator company.	DUNS number (Format: Up to 40 characters)
Creator Location ID	The location ID of the creator company.	DUNS + 4 or Local ID (Format: Up to 40 characters long)
Creator Aggregate Type	Enter 0 for leaf, 1 for any and 2 for SUM	LEAF, (IF Location ID=DUNS +4); ANY/SUM, (IF Location ID = Local ID)
Partner Company ID	Your trading partner's company ID.	DUNS number (Format: 10 character Numeric)
Partner Location ID	Your trading partner's location ID	DUNS +4 number OR Local ID. In case of Local ID, the Partner company ID should be same as Creator Company ID. (Format: Up to 40 characters)
Partner Aggregate Type	Enter 0 for leaf, 1 for any and 2 for SUM	LEAF, (IF Location ID=DUNS +4); ANY/SUM, (IF Location ID = Local ID)
Global Item Number	The product's ID or Local ID.	Up to 40 character alphanumeric
Product Aggregate Type	Enter 0 for leaf, 1 for any and 2 for SUM	LEAF, if Global Item Number; ANY/SUM, If GIN=Local ID
Period Begin	The Metric's beginning time period	If "Is Period Rolling" is set to "true" then use Integer else Use Fixed Date. (format: YYYYMMDD)
Period End	The Metric's ending time period	If "Is Period Rolling" is set to "true" then use Integer else Use Fixed Date. (format: YYYYMMDD). It Should be greater than Period Begin
Metric Name	The name of the Metric	Up to 40 alphanumeric characters
Type	The type of the Metric	2 = Growth 3 = Simple Math 4 = Average 5 = Time Average 6 = Inventory Turns 7 = Variability 8 = Periods of Supply 9 = Forecast Error / Accuracy 10 = Weighted Average Error 11 = Rolling Error 12 = Count Missing 13 = Exception Count 14 = Period to Date 15 = Perpetual Inventory
User Name	The name of the User creating the Metric	Up to 40 alphanumeric characters

Table A-19 (Cont.) Metrics Loader/Extractor Field Definitions

Column	Description	Value
Is Period Rolling	Enter "1" if rolling period; enter "0" if fixed period.	False, 0 / TRUE, 1
Period Overlay Name	The name of the Period Overlay	Up to 40 alphanumeric characters
Is Percent	Enter "1" if Percent; enter "0" if Absolute.	False, 0 / TRUE, 1
Base Is Local	Is Creator Company Local (TRUE, 1) OR Non-Local (False, 0)	False, 0 / TRUE, 1
Base Type Code	The base data stream type code	*
Base Item Type Code	The base data stream item type code: 1 = base, 2 = promo, 3 = seasonal, 4 = total	*
Comp is Local	Is Partner Company Local (TRUE, 1) or Non-Local (False, 0)	False, 0 / TRUE, 1
Comp Type Code	The comparison stream type code	*
Comp Item Type Code	The comparison stream item type code: 1 = base, 2 = promo, 3 = seasonal, 4 = total	*
Offset Type	1 = Period Offset, 2 = Gen Offset	*
Offset	Generation or Period Offset value (NUMERIC)	Positive Integer
Offset Is Base	Is Offset base	False, 0 / TRUE, 1
Output Type	1 = Inventory Turns, 2 = Average Periods of Supply	*
Output Type Code	Metric output stream type code	*
Output Item Type Code	Metric output stream item type code	*
Order Number	Metric processing order number	Integer Value 1 - 5
Frequency	Running frequency for Metric	Positive Integer
Stream Type Code 3	Stream type code 3 for SUM metric	*
Stream Item Type 3	Stream Item type code 3 for SUM metric	*
Stream Is Local 3	Is Stream Local (1) OR Partner (0)	Partner, 0 / Local, 1
Stream Type Code 4	Stream type code 4 for SUM metric	*
Stream Item Type 4	Stream Item type code 4 for SUM metric	*
Stream Is Local 4	Is Stream Local (1) OR Partner (0)	Partner, 0 / Local, 1
Stream Type Code 5	Stream type code 5 for SUM metric	*

Table A-19 (Cont.) Metrics Loader/Extractor Field Definitions

Column	Description	Value
Stream Item Type 5	Stream Item type code 5 for SUM metric	*
Stream Is Local 5	Is Stream Local (1) OR Partner (0)	Partner, 0 / Local, 1
Stream Type Code 6	Stream type code 6 for SUM metric	*
Stream Item Type 6	Stream Item type code 6 for SUM metric	*
Stream Is Local 6	Is Stream Local (1) OR Partner (0)	Partner, 0 / Local, 1
Stream Type Code 7	Stream type code 7 for SUM metric	*
Stream Item Type 7	Stream Item type code 7 for SUM metric	*
Stream Is Local 7	Is Stream Local (1) OR Partner (0)	Partner, 0 / Local, 1
Stream Type Code 8	Stream type code 8 for SUM metric	*
Stream Item Type 8	Stream Item type code 8 for SUM metric	*
Stream Is Local 8	Is Stream Local (1) OR Partner (0)	Partner, 0 / Local, 1
Stream Type Code 9	Stream type code 9 for SUM metric	*
Stream Item Type 9	Stream Item type code 9 for SUM metric	*
Stream Is Local 9	Is Stream Local (1) OR Partner (0)	Partner, 0 / Local, 1
Stream Type Code 10	Stream type code 10 for SUM metric	*
Stream Item Type 10	Stream Item type code 10 for SUM metric	*
Stream Is Local 10	Is Stream Local (1) OR Partner (0)	Partner, 0 / Local, 1
Weight Is Base	Is Weight base	False, 0 / TRUE, 1 / None, -1
Divisor Is Base	Is Divisor base	False, 0 / TRUE, 1
Number of Periods to Average (N)	The number of periods to average.	Any integer, $H + L < \text{abs } N$
Number of Periods to Roll	The number of periods to roll.	Any integer
Number of High Filter	The number of high filter	Positive integer
Number of Low Filter	The number of low filter	Positive integer

Table A-19 (Cont.) Metrics Loader/Extractor Field Definitions

Column	Description	Value
POS Type	1 = Period of Supply Leading, -1 = Period of Supply Trailing	
Exception Status	0 = Active 1 = In-Process 2 = Auto In-Process 3 = Supersedes 4 = Escalated 5 = Auto Escalated 6 = Auto Incomplete 11 = Dismissed 12 = Resolved 13 = Unresolvable 14 = Obsolete 15 = Superseded 21 = Auto-Dismissed 23 = Auto-Resolved 24 = Auto-Unresolvable	Examples include multiple statuses: 0#1#2# single status: 0#
Forecast Type	Applicable for Forecast Error, Rolling Error, and Weighted Average Error	Value: 1 = Error 2 = Accuracy
Is Absolute Value	Only applicable for Forecast Error	Value: 1 = True 2 = False
Is Null Zero	Treat null values as zeros.	0 = False 1 = True
Frequency Type	Frequency selected to recur once, always, or at specific intervals.	0 = Run once 1 = Run always 2 = Run once every n days 3 = Run once every n weeks 4 = Run once every n months
Frequency Day	Run once every n days, on the day specified.	1 = Sunday 2 = Monday 3 = Tuesday 4 = Wednesday 5 = Thursday 6 = Friday 7 = Saturday
Frequency Week	Run once every n weeks, on the day specified in Frequency Day	Any week number; 1 or greater.
Frequency Time	Optional time in GMT after which the job should be run.	TIME

Table A-19 (Cont.) Metrics Loader/Extractor Field Definitions

Column	Description	Value
Report On Overlay	Only applicable for Periods of Supply and Inventory Turns Average Periods of Supply.	0 = False 1 = True
Include Current Period	Only applicable for Periods of Supply metric.	0 = False 1 = True
Operation Type	Applicable for Simple Math	0 = Sum -1 = Product -2 = Difference -3 = Ratio
Frequency First Run Date	Optional Begin Date after which the job becomes active.	DATE
Frequency Last Run Date	Optional End Date after which the job becomes inactive.	DATE

*The value for Type Code and Item Type Code fields are defined by the user in the Data Stream mapping utility during loader/extractor configuration

Sample Metrics Loader Datafile:

```

111,111-001,0,111,PartLoc_Test1,2,Prod_Test1,1,0,1,Weighted-Average_Forecast_
Error,10,loader,1,,0,1,21,1,1,21,1,2,0,1,,41,1,3,0,,,,,,,,,,,,,1,0,,,,,1,
111,111-001,0,111,PartLoc_Test1,1,Prod_
Test1,1,0,1,Weight-FC-Error-Accuracy,10,loader,1,,1,1,21,1,1,21,1,2,2,1,,41,1,3,0,,,,,,,,,,,,,
,,,,,1,0,,,,,2,
111,111-001,0,111,PartLoc_Test1,2,Prod_Test1,2,0,1,Weighted_Avg_FC_
Metric,10,loader,1,,0,1,21,1,1,21,1,2,0,1,,41,1,3,0,,,,,,,,,,,,,1,0,,,,,1,
111,111-001,0,111,PartLoc_Test1,1,Prod_
Test1,1,0,1,Variability,7,loader,1,,0,1,21,1,,,,,41,1,3,0,,,,,,,,,,,,,4,,,,,
111,111-001,0,111,PartLoc_Test1,1,Prod_Test1,1,0,1,Time
Average-Metric,5,loader,1,,0,1,21,1,,,,,41,1,3,0,,,,,,,,,,,,,6,2,3,,,
111,111-001,0,111,PartLoc_Test1,1,Prod_Test1,1,0,1,Sum
metric,3,loader,1,,0,1,21,1,1,23,1,,,,,25,1,3,0,,,,,,,,,,,,,
111,111-001,0,111,PartLoc_Test1,1,Prod_
Test1,1,0,1,RE-Accuracy-PO-none,11,loader,1,,1,1,21,1,1,21,1,2,2,,41,1,3,0,,,,,,,,,,,,,
0,3,,,,,2,
111,111-001,0,111,PartLoc_Test1,1,Prod_Test1,1,20030217,20030224,Rolling_Error_
Metric,11,loader,0,Mertric_Poverlay,0,1,21,1,1,21,1,2,0,,41,1,3,0,,,,,,,,,,,,,0,0,,,,,1,
111,111-001,0,111,PartLoc_Test1,1,Prod_Test1,1,6,12,Ratio
Metric-overlay,1,loader,1,Mertric_
Poverlay,0,1,21,1,1,21,1,1,3,1,,41,1,3,0,,,,,,,,,,,,,
111,111-001,0,111,PartLoc_Test1,1,Prod_Test1,1,20030210,20030213,Periods of supply_
Trailing,8,loader,0,,0,1,1,1,1,21,1,,,,,41,1,3,0,,,,,,,,,,,,,-1,,,
111,111-001,0,111,PartLoc_Test1,1,Prod_Test1,1,8,15,Periods of supply
metric,8,loader,1,,0,1,1,1,1,21,1,,,,,41,1,3,0,,,,,,,,,,,,,1,,,

```

```

111,111-001,0,111,PartLoc_Test1,1,Prod_Test1,1,0,1,Inv Turns/ Avg per
supply,6,loader,1,Mertric_Poverlay,0,1,1,1,21,1,,,,,2,41,1,3,4,,,,,,,,,,,,,0,,,,,
111,111-001,0,111,PartLoc_Test1,1,Prod_Test1,1,0,1,Inv_turns_Metric,6,loader,1,Mertric_
Poverlay,0,1,16,1,0,21,1,,,,,1,41,1,3,0,,,,,,,,,,,,,0,,,,,
111,111-001,0,111,PartLoc_Test1,1,Prod_Test1,1,3,6,Growth
Metric-2-agg-any,2,loader,1,Mertric_Poverlay,0,1,17,1,,,,,1,5,,,,,45,1,3,0,,,,,,,,,,,,,
111,111-001,0,111,PartLoc_Test1,1,Prod_Test1,1,5,10,Forecast
Accuracy-agg-any,9,loader,1,,1,1,26,1,1,27,1,2,3,1,,45,1,3,0,,,,,,,,,,,,,0,,,,,2,
111,111-001,0,111,PartLoc_Test1,1,Prod_Test1,2,0,1,Forecast_Error_
Metric,9,loader,1,,1,1,21,1,1,21,1,2,2,1,,41,1,3,0,,,,,,,,,,,,,0,,,,,1,1
111,111-001,0,111,PartLoc_Test1,1,Prod_Test1,1,8,12,Exception_Count_
Metric,13,loader,1,,0,,,,,25,1,3,0,,,,,,,,,,,,,0#1#11#12#13#14#15#21#23#24#,
111,111-001,0,111,PartLoc_Test1,2,Prod_Test1,1,20030220,20030225,Count_ Missing_
Metric,12,loader,0,,0,1,24,1,,,,,41,1,3,0,,,,,,,,,,,,,
111,111-001,0,111,PartLoc_Test1,2,Prod_Test1,1,-5,-3,Average_Metric_
Rolling,4,loader,1,,0,1,23,1,,,,,1,1,3,0,,,,,,,,,,,,,
111,111-001,0,222,222-001,0,Prod_Test1,2,20030220,20030225,Average
Metic,4,loader,0,,0,0,21,1,,,,,22,1,3,0,,,,,,,,,,,,,

```

Aggregate Definitions Loader

Uses AggregateDefinition.template file.

The fields you can define for the Aggregate Definitions Loader are:

Table A-20 Aggregate Definitions Loader

Column	Description	Value	Optional
Creator Company ID	The ID of the creator company.		
Creator Location ID	The Location ID of the creator company.		No
Creator Aggregate Type	The Aggregate Type of the creator company.		No
Partner Company ID	The ID of the partner company.		No
Partner Location ID	The Location ID of the partner company.		No
Partner Aggregate Type	The Aggregate Type of the partner company.		No
Global Item Number	The product's ID.		No
Product Aggregate Type	The product's Aggregate Type.		No
Period Begin	Aggregate range begin period.	YYYYMMDD	No
Period End	Aggregate range end period.	YYYYMMDD	No
Data Stream Type Code			No

Table A–20 (Cont.) Aggregate Definitions Loader

Column	Description	Value	Optional
Unit-of-Measure		1 = Base 2 = Stat 3 = Currency 4 = Loads	No

Aggregate Definitions exported through the client will be in the following order:

Creator company Id, Creator Location Id, Partner company Id, Partner Location Id, Global Item Number, Period Begin, Period End, Stream Type code, UOM, Creator Aggregate type, partner aggregate type, product aggregate type.

Sample Aggregate Definitions Loader file

```
111,111-001,111,PartLoc_Test1,Prod_Test1,20020120,20041225,5,1,0,1,1
111,Loc_Test1,111,PartLoc_Test1,Prod_Test1,20020204,20020331,2,1,1,1,1
111,Loc_Test1,111,PartLoc_Test1,Prod_Test1,20020204,20020331,5,1,1,1,1
111,Loc_Test1,111,PartLoc_Test1,Prod_Test1,20020204,20020210,15,1,1,1,1
```

Collaboration Product Hierarchy Extractor

Collaboration Product Hierarchy Extractor allows for the selection of a file delimiter. Options include Comma, Tab, and Other. If “Other” is selected, use caution in providing a delimiter to ensure that the character chosen is not being used in the data itself.

Demand Policy Loader/Extractor

The template control file for the Demand Policy loader is DemandPolicy.template.

The fields you can define for the demands policy loader/extractor are:

Table A–21 Demand Policy Loader Field Definitions

Column	Description	Value	Optional
Demand Stream Name	The name of the Demand stream set.	Format: up to 200 alphanumeric characters	No
Creator Company ID	The ID of the Local company for which the Demand Policy being created	DUNS number. (Format: 40 characters)	No
Creator Location ID	The location ID of the company.	DUNS + 4 or Local ID (Format: 40 characters long)	No
Partner Company ID	Trading partner's company ID	DUNS (Format: 10 character numeric).	No
Partner Location ID	Trading partner's location ID	DUNS+4 or Local ID). When "Partner Location ID" is provided as "Folder" (i.e. Local ID) then the Partner Company ID has to be the company ID of the "Local" company and the Folder (Local ID) should belong to the "Local" company. (Format: 40 characters)	No

Table A–21 (Cont.) Demand Policy Loader Field Definitions

Column	Description	Value	Optional
Global Item Number	The product's ID (GIN).	GIN OR Local ID. Format: 40 character alphanumeric	No
Method	Method used to determine the Demand.	String or Numeric, numeric value from 0-10. String is the name of the method	No
Smoothing Pre-filter	Used to determine the Demand.	string or numeric, numeric value from 0-6 and string is the name of the Filter	No
Seasonal Pre-filter	Used to Determine the Demand.	string or numeric, numeric value from 0-2 and string is the name of the Filter	No
Trials	Number of "tries" in determining the Demand	number	
End-Of-Life Date	The Date after which the Policy does not determine the Demand	If specified, then the forecast is forced to zero for all periods after the end-of-life date. This can be accomplished either by shortening the request to Geneva (i.e., the folder-level forecast job asks for 26 future periods, but the end-of-life on this item is 12 periods away, so for this item only request 12 forecast periods from Geneva, and 26 forecast periods on the other items in the job), or just submit the full request to Geneva, and truncate the output before displaying or saving back to the stream. (Format: can be chosen from variety of format available through configuration UI)	No
Use Lift factors	Boolean value to specify if the Lift factors to be used or Not.	BOOLEAN OR NUMBER, Boolean=true/false, Number- 1/0. (Format: character/numeric	No
Use Like Item	Since historical data is required to generate a forecast, new or replacement SKU's can present a challenge. One way around the problem is to allow the use of history data from a "like item".	If "Use Like Item" is set to "No", then "Context", "End Date", and "Multiplier" do not apply. (Format: Boolean or Number. Boolean=true/false, Number=1 or 0)	No
Like Item Creator Location ID	The location ID of the Local company that created the like item	DUNS+4 or Local ID. (Format: 40 characters)	Yes
Like Item Partner Company ID	Trading partner's company ID	DUNS. (Format: 10 character numeric). Can be any partner from the Partner Tree	Yes
Like Item Partner Location ID	Trading partner's location ID	DUNS+4 OR Local ID . (Format: 40 characters). Can be any Partner from the Partner Location Tree. If Local ID then Partner Company ID is the same as Local Company ID	Yes
Like Item Global Item Number	The product's ID (GIN).	GIN or Local ID. Format: 40 character alphanumeric	Yes
Like Item End Date	History values are picked up till this date for the "Like Item".	(Format: YYYYMMDD)	Yes

Table A-21 (Cont.) Demand Policy Loader Field Definitions

Column	Description	Value	Optional
Multiplier	The number by which the History period values to be multiplied in order to get the forecast values	Number. This values is identified as per the company's standards.	Yes
User name	The name of the person responsible for the creation of demand policy.	Format: up to 40 alphanumeric characters	No
Creator Aggregate Type	Creator Location leaf or folder	0, 1	No
Partner Aggregate Type	Partner Location leaf or folder	0, 1	No
Product Aggregate Type	Product leaf or folder	0, 1	No
History Start	Start period of History Data	Format: Up to 10 numbers	Yes
historyStart Date	Start Date of History data	Date: YYYYMMDD	Yes
History Start Is Rolling	History Begin is fixed or rolling	0, 1	No
History End	History End Period	Format: Up to 10 numbers	Yes
historyEndDate	History End Date	Date: YYYYMMDD	Yes
History End Is Rolling	History End is rolling or fixed	0, 1	No
Forecast Start	Forecast Begin Period	Format: up to 2 numbers	Yes
forecastStartDate	Forecast Start date	Date: YYYYMMDD	Yes
Forecast Start Is Rolling	Forecast Begin is rolling or fixed	0, 1	No
Forecast End	Forecast End Period	0, 1	Yes
forecastEndDate	Forecast End Date	Date: YYYYMMDD	Yes
Forecast End Is Rolling	Forecast End is rolling or fixed	0, 1	No
Period Overlay Name	Period Overlay used for the policy		Yes

Table A-22 Demand Table

Column Name	Description	Value	Optional
Demand Stream Name	The name of the Demand stream set	Format: up to 200 alphanumeric characters	No
Creator Company ID	The ID of the Local company for which the Demand Policy being created	DUNS number. (Format: 40 characters)	No
Creator Location ID	The location ID of the company.	DUNS + 4 or Local ID (Format: 40 characters long)	No
Partner Company ID	Trading partner's company ID	DUNS. (Format: 10 character numeric).	No
Partner Location ID	Trading partner's location ID	DUNS+4 or Local ID). When "Partner Location ID" is provided as "Folder" (i.e. Local ID) then the Partner Company ID has to be the company ID of the "Local" company and the Folder (Local ID) should belong to the "Local" company. (Format: 40 characters)	No
Global Item Number	The product's ID (GIN).	GIN OR Local ID. Format: 40 character alphanumeric	No
Method	Method used to determine the Demand.	String or Numeric, numeric value from 0-10. String is the name of the method	No
Smoothing Pre-filter	Used to determine the Demand.	string or numeric, numeric value from 0-6 and string is the name of the Filter	No
Seasonal Pre-filter	Used to Determine the Demand.	string or numeric, numeric value from 0-2 and string is the name of the Filter	No
Trials	Number of "tries" in determining the Demand	number	
End-Of-Life Date	The Date after which the Policy does not determine the Demand	If specified, then the forecast is forced to zero for all periods after the end-of-life date. This can be accomplished either by shortening the request to Geneva (i.e., the folder-level forecast job asks for 26 future periods, but the end-of-life on this item is 12 periods away, so for this item only request 12 forecast periods from Geneva, and 26 forecast periods on the other items in the job), or just submit the full request to Geneva, and truncate the output before displaying or saving back to the stream. (Format: can be chosen from variety of format available through configuration UI)	No
Use Lift factors	Boolean value to specify if the Lift factors to be used or Not.	BOOLEAN OR NUMBER, Boolean-true/false, Number- 1/0. (Format: character/numeric	No

Table A-22 (Cont.) Demand Table

Use Like Item	Since historical data is required to generate a forecast, new or replacement SKU's can present a challenge. One way around the problem is to allow the use of history data from a "like item".	If "Use Like Item" is set to "No", then "Context", "End Date", and "Multiplier" do not apply. (Format: Boolean or Number. Boolean=true/false, Number=1 or 0)	No
Like Item Creator Location ID	The location ID of the Local company that created the like item	DUNS+4 or Local ID. (Format: 40 characters)	Yes
Like Item Partner Company ID	Trading partner's company ID	DUNS. (Format: 10 character numeric). Can be any partner from the Partner Tree	Yes
Like Item Partner Location ID	Trading partner's location ID	DUNS+4 OR Local ID . (Format: 40 characters). Can be any Partner from the Partner Location Tree. If Local ID then Partner Company ID is the same as Local Company ID	Yes
Like Item Global Item Number	The product's ID (GIN).	GIN or Local ID. Format: 40 character alphanumeric	Yes
Like Item End Date	History values are picked up till this date for the "Like Item".	(Format: YYYYMMDD)	Yes
Multiplier	The number by which the History period values to be multiplied in order to get the forecast values	Number. This values is identified as per the company's standards.	Yes
User name	The name of the person responsible for the creation of demand policy.	Format: up to 40 alphanumeric characters	No
Creator Aggregate Type	Creator Location leaf or folder	0, 1	No
Partner Aggregate Type	Partner Location leaf or folder	0, 1	No
Product Aggregate Type	Product leaf or folder	0, 1	No
History Start	Start period of History Data	Format: Up to 10 numbers	Yes
historyStart Date	Start Date of History data	Date: YYYYMMDD	Yes
History Start Is Rolling	History Begin is fixed or rolling	0, 1	No
History End	History End Period	Format: Up to 10 numbers	Yes

Table A–22 (Cont.) Demand Table

historyEnd Date	History End Date	Date: YYYYMMDD	Yes
History End Is Rolling	History End is rolling or fixed	0, 1	No
Forecast Start	Forecast Begin Period	Format: up to 2 numbers	Yes
forecastStart Date	Forecast Start date	Date: YYYYMMDD	Yes
Forecast Start Is Rolling	Forecast Begin is rolling or fixed	0, 1	No
Forecast End	Forecast End Period	0, 1	Yes
forecastEnd Date	Forecast End Date	Date: YYYYMMDD	Yes
Forecast End Is Rolling	Forecast End is rolling or fixed	0, 1	No
Period Overlay Name	Period Overlay used for the policy		Yes

Sample Demand Policy Loader File

```
test,10-124-1107,10-124-1107-0001,30-333-3333,30-333-3333-0001,0168846122,3,2,1,1,2003
0126,1,1,10-124-1107-0001,30-333-3333,30-333-3333-0001,0168846122,20030202,1.5,Dave
Wilson,0,0,0,,20000109,0,0,,1,,2003040,0,3,,1,PeriodOverlayName
```

Sample Demand Policy Extractor File

```
test,10-124-1107,10-124-1107-0001,30-333-3333,30-333-3333-0001,0168846122,3,2,1,1,2003
0126,1,1,10-124-1107-0001,30-333-3333,30-333-3333-0001,0168846122,20030202,1.5,Dave
Wilson,0,0,0,,20000109,0,0,,1,,2003040,0,3,,1,PeriodOverlayName
```

Demand Stream Set Loader

The template file for the Demand Stream Set loader is DemandStreams.template

The columns you can define for the Demand Stream Set loader are:

Table A–23 Demand Stream Set Loader Field Definitions

Column	Description	Value	Optional
Demand Stream Name	The name of the Demand Stream Set.	Up to 200 alphanumeric characters	No
Creator Company ID	The ID of the Local company for which the Stream Set is being created.	DUNS. (Format: 40 characters)	No
History Stream Type	The History Stream Type being used to determine the Demand.	Name or Stream Type.	No

Table A–23 (Cont.) Demand Stream Set Loader Field Definitions

Column	Description	Value	Optional
History Item Stream Type	The Stream Item Type of History Stream Type being used to determine the Demand.	Name or Stream Item Type Code	No
History Stream Is Local	Specify if the History Stream Type belongs to Local Company or Trading Partner's company	Enter "TRUE" or "1" if this history stream is local; enter "FALSE" or "0" if this history stream is not local. (Format: Boolean or number. Boolean-true/false, Number -1/0).	No
Factor Stream Type	The Lift Factor Stream Type being used to determine the Demand.	Name or stream type code.	Yes
Factor Stream Item Type	The Stream Item Type of Lift Factor Stream Type being used to determine the Demand.	Name or stream item type code.	Yes
Factor Stream Is Local	Specify if the Lift Factor Stream Type belongs to Local Company or Trading Partner's company	Enter "TRUE" or "1" if this history stream is local; enter "FALSE" or "0" if this history stream is not local. (Format: Boolean or number. Boolean-true/false, Number -1/0).	Yes
Forecast Stream Type	The Forecast Stream Type used for determining the Demand.	Output stream name or stream type code.	No
Forecast Stream Item Type	The Stream Item Type of Forecast Stream Type being used to determine the Demand.	Output stream name or stream item type code.	No

Supply Policy Loader/Extractor

The template control file for the Supply Policy loader is Supplypolicy.template.

The fields you can define for the Supply Policy loader/extractor are:

Table A–24 Supply Policy Loader/Extractor Field Definitions

Default	Column	Description	Optional	Possible Values
1	Supply Stream Set Name	Name of the Supply Stream Set	No	String
2	Creator Company ID	Creator Company	No	DUNS (STRING)
3	Creator Location ID	Creator Location	No	DUNS+4 (STRING)
4	Partner Company ID	Partner Company	No	DUNS (STRING)
5	Partner Location ID	Partner Location	No	DUNS+4 (STRING)
6	Global Item Number	Product Item	No	GIN Format (STRING)

Table A-24 (Cont.) (Cont.) Supply Policy Loader/Extractor Field Definitions

Default	Column	Description	Optional	Possible Values
7	Safety Stock Type	"Fixed" or "Stream Based" Type of Safety Stock	No	"Fixed", 0 / "Stream Based", 1
8	Safety Stock	Safety Stock, in Base Units (for "Fixed" Safety Stock Type ONLY)	Dependent	NULL / NUMBER >= 0
9	Lead Time Average	Average Transit Lead Time, used for Safety Stock, in Base Periods	No	INTEGER >= 0
10	Lead Time Variability	Transit Lead Time Variability, used for Safety Stock, in Days	No	INTEGER >= 0
11	Minimum Inventory Override	% of the Safety Stock to use as the Minimum allowable Inventory, in Percents	No	0 < NUMBER < Max. Inventory
12	Maximum Inventory	% of the Safety Stock to use as the Maximum allowable Inventory, in Percents	No	NUMBER > 100
13	Inventory Period	"Previous" or "Current" Period, where the Beginning Inventory is in the Inventory Stream	No	Previous, -1 / Current, 0
14	Unavailable Stock	Unusable Inventory, counted as part of total Inventory On-Hand, in Base Units	No	NUMBER >= 0
15	Order Processing Time	Time for the Seller to get Order in-transit to the Buyer, in Base Periods	No	INTEGER >= 0
16	Transit Lead Time	Travel Time between Seller Location and Buyer Location, in Base Periods	No	INTEGER >= 0
17	Minimum Order Quantity	Minimum Quantity that could be ordered, in Base Units	No	NUMBER >= 0
18	Order Increment Quantity	After Min. Qty, multiple in which the Order Qty can be increased, in Base Units	No	NUMBER > 0
19	Planning Horizon	Number of Periods for which Supply Planning runs	No	INTEGER >= 0
20	Service Level	Target level of Service, in Percents	No	80 < NUMBER < 99.9
21	End-Of-Life Date	Product End-Of-Life Date, that is converted into the Base period	Yes	NULL / DATE

Table A-24 (Cont.) (Cont.) Supply Policy Loader/Extractor Field Definitions

Default	Column	Description	Optional	Possible Values
22	Telescoping Period Overlay	Output is calculated and conformed into Telescoping Period Overlay format	Yes	NULL / ANY Tele-Overlay
23	Apply Frozen Period	Flag for Frozen Period = Order Processing Time + Transit Lead Time	No	"No", 0 / "Yes", 1
24	Order Interval Days	Number of Days between Orders. In Days. Currently IGNORED	Yes	NULL / Integer >= 0
25	Rounding Rules	Suggested pallet/truckload Rounding Rules (Round up/down). Currently IGNORED	Yes	NULL / STRING
26	Safety Stock Rules	Suggested treatment of the Safety Stock. Currently IGNORED	Yes	NULL / STRING
27	Transportation Strategy Description	Suggested Transportation Strategy (Preferred route, etc.) Currently IGNORED	Yes	NULL / STRING
28	Creator Aggregate Type	Creator Location leaf or folder	0, 1	No
29	Partner Aggregate Type	Partner Location leaf or folder	0, 1	No
30	Product Aggregate Type	Product leaf or folder	0, 1	No
31	User Name	User that creates Supply Policy	No	ANY User Name
32	Receiving Lead Time	Time Allowed for receiving prior to consumption	No	Integer >=0

Sample Supply Policy File:

```
//
Stream,CreatorCompID,CreatorLocationID,PartnerCompID,PartnerLocationID,Global
ItemNumber,SSType,SStock,LTmAvg,LTmVar,Min.Inv,Max.Inv,InventoryPer,UnavSt,O
rderPT,TransLT,Min.Ord,OrdInc,PlanHor,ServLev,EOLDate,TelePO,ApplyFPer,OrdInt,
RndRule,SSRule,TransSt,CreatorAggregateType,PartnerAggType,ProductAggType,Us
erName,ReceivingLeadTime
```

//

```
Test,10-124-1107,-24,30-333-3333,-22,-11,1,1,0,80,150,Previous,0,2,1,50,5,21,,99,20020630,
Yes,0>Hello1>Hello2>Hello3,0,DaveWilson,0,0,0,0
```

```
Test,10-124-1107,-24,30-333-3333,-22,-11,1,1,0,80,150,Current,0,2,1,50,5,21,,99,20020630,Y
es,0>Hello1>Hello2>Hello3,1,DaveWilson
```

Test,10-124-1107,-24,30-333-3333,-22,-11,0,100,1,0,75,150,Previous,0,2,4,50,5,21,.99,20020630,Yes,0,Hello1,Hello2,Hello3,2,DaveWilson

Test,10-124-1107,-24,30-333-3333,-22,-11,1,1,0,80,150,Current,0,2,4,50,5,21,.99,20020630,Yes,0,Hello1,Hello2,Hello3,3,DaveWilson

Test,10-124-1107,-24,30-333-3333,-22,-12,0,100,1,0,75,150,Previous,15,2,1,50,5,21,.99,20020630,Yes,0,Hello1,Hello2,Hello3,0,DaveWilson

Test,10-124-1107,-24,30-333-3333,-22,-12,1,1,0,80,150,Current,0,2,1,50,5,20,.99,20020630,Yes,0,Hello1,Hello2,Hello3,1,DaveWilson

Test,10-124-1107,-24,30-333-3333,-22,-12,0,100,1,0,75,150,Previous,0,2,1,50,5,21,.99,20020630,Yes,0,Hello1,Hello2,Hello3,2,DaveWilson

Test,10-124-1107,-24,30-333-3333,-22,-12,1,1,0,80,150,Current,0,2,1,50,5,20,.99,20020630,Yes,0,Hello1,Hello2,Hello3,3,DaveWilson

Supply Blocked Dates Loader/Extractor

The template control file for Supply Blocked Dates loader is SupplyBlockedDates.template.

The fields you can define for the Blocked Dates for Calendar loader/extractor are:

Table A-25 Supply Blocked Dates Field Definitions

Column	Description	Possible Values
Company ID	The ID of the company that created the data for the stream	DUNS
Location ID	The location ID of the company. Location ID can be specified at the Leaf-level only.	Duns+4
Blocked Date	Date to be blocked or unblocked.	Date in any of the following formats: yyyyMMdd, yyyy-MM-dd, yyyy.dd.MM, yyyy/dd/MM
Is Blocked	Action to take: block the date (true or 1) or unblock the date (False or 0).	FALSE, 0 or TRUE, 1
User Name	User that creates Supply Blocked Dates.	

Rules:

Location ID only can be specified at the leaf-level.

Sample Supply Blocked Dates Datafile

//// DATE in the FUTURE

10-124-1107,10-124-1107-0001,2002-07-01,TRUE,Dave Wilson

10-124-1107,10-124-1107-0001,2002-07-02,1,Dave Wilson

10-124-1107,10-124-1107-0001,2002-07-03,TRUE,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-07-04,1,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-07-03,FALSE,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-07-04,0,Dave Wilson

///// PRESENT DATE

10-124-1107,10-124-1107-0001,2002-05-13,TRUE,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-14,1,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-15,TRUE,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-16,1,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-17,TRUE,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-18,1,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-19,TRUE,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-20,1,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-21,TRUE,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-22,1,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-23,TRUE,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-24,1,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-25,TRUE,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-26,1,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-27,TRUE,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-28,1,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-29,TRUE,Dave Wilson
 10-124-1107,10-124-1107-0001,2002-05-30,1,Dave Wilson

Supply Stream Set Loader

The template file for the Stream Selection for Supply is SupplyStreams.template.

The fields you can define for the Stream Selection for Supply are:

Table A-26 Supply Stream Set Loader Fields

Default	Input/Output	Column Name	Description	Optional
1	Supply Stream Set Name	Unique name for the Supply Stream Set	No	
2	Creator Company ID	Creator Company (DUNS)	No	
3		Consumption Forecast Type	Mapping Consumption Forecast to specific Stream Type*	No
4	Input	Consumption Forecast Item Type	Mapping Consumption Forecast to specific Stream Item Type**	No

Table A–26 (Cont.) (Cont.) Supply Stream Set Loader Fields

Default	Input/Output	Column Name	Description	Optional
5		Consumption Forecast Is Local	Consumption Forecast Stream -- Local (1, TRUE) or Partner (0, FALSE)	No
6		Consumption Actual Type	Mapping Consumption Actual to specific Stream Type*	No
7	Input	Consumption Actual Item Type	Mapping Consumption Actual to specific Stream Item Type**	No
8		Consumption Actual Is Local	Consumption Actual Stream -- Local (1, TRUE) or Partner (0, FALSE)	No
9		Inventory Type	Mapping Inventory to specific Stream Type*	No
10	Input	Inventory Item Type	Mapping Inventory to specific Stream Item Type**	No
11		Inventory Is Local	Inventory Stream -- Local (1, TRUE) or Partner (0, FALSE)	No
12		Expected Arrival 1 Type	Mapping Expected Arrival 1 to specific Stream Type*	Yes
13	Input	Expected Arrival 1 Item Type	Mapping Expected Arrival 1 to specific Stream Item Type**	Yes
14		Expected Arrival 1 Is Local	Expected Arrival 1 Stream -- Local (1, TRUE) or Partner (0, FALSE)	Yes
15		Expected Arrival 2 Type	Mapping Expected Arrival 2 to specific Stream Type*	Yes
16	Input	Expected Arrival 2 Item Type	Mapping Expected Arrival 2 to specific Stream Item Type**	Yes
17		Expected Arrival 2 Is Local	Expected Arrival 2 Stream -- Local (1, TRUE) or Partner (0, FALSE)	Yes
18		Expected Arrival 3 Type	Mapping Expected Arrival 3 to specific Stream Type*	Yes
19	Input	Expected Arrival 3 Item Type	Mapping Expected Arrival 3 to specific Stream Item Type**	Yes
20		Expected Arrival 3 Is Local	Expected Arrival 3 Stream -- Local (1, TRUE) or Partner (0, FALSE)	Yes
21		Expected Arrival 4 Type	Mapping Expected Arrival 4 to specific Stream Type*	Yes
22	Input	Expected Arrival 4 Item Type	Mapping Expected Arrival 4 to specific Stream Item Type**	Yes
23		Expected Arrival 4 Is Local	Expected Arrival 4 Stream -- Local (1, TRUE) or Partner (0, FALSE)	Yes
24		Expected Arrival 5 Type	Mapping Expected Arrival 5 to specific Stream Type*	Yes

Table A-26 (Cont.) (Cont.) Supply Stream Set Loader Fields

Default	Input/Output	Column Name	Description	Optional
25	Input	Expected Arrival 5 Item Type	Mapping Expected Arrival 5 to specific Stream Item Type**	Yes
26		Expected Arrival 5 Is Local	Expected Arrival 5 Stream -- Local (1, TRUE) or Partner (0, FALSE)	Yes
27		Safety Stock Type	Mapping Safety Stock to specific Stream Type*	Yes
28	Input/Output	Safety Stock Item Type	Mapping Safety Stock to specific Stream Item Type***	Yes
29		Safety Stock Is Local	Safety Stock Stream -- Local (1, TRUE) or Partner (0, FALSE)	Yes
30	Output	Projected Inventory Type	Mapping Projected Inventory to specific Stream Type*	Yes ****
31		Projected Inventory Item Type	Mapping Projected Inventory to specific Stream Item Type***	Yes ****
32	Output	Receipt Forecast Type	Mapping Receipt Forecast to specific Stream Type*	Yes ****
33		Receipt Forecast Item Type	Mapping Receipt Forecast to specific Stream Item Type***	Yes ****
34	Output	Shipment Forecast Type	Mapping Shipment Forecast to specific Stream Type*	Yes ****
35		Shipment Forecast Item Type	Mapping Shipment Forecast to specific Stream Item Type***	Yes ****

* Stream Type could be Numeric or String, depending on Data Stream Type Codes mapping

** Stream Item Type could be Numeric or String, depending on Data Stream Type Codes mapping. Allowed values: 1, 2, 3, 4 ("Total" SITC)

*** Stream Item Type could be Numeric or String, depending on Data Stream Type Codes mapping. Allowed values: 1, 2, 3 (NO "Total" SITC)

**** SEE Rule #6

1. The creator of Input Streams and Input/Output Safety Stock Stream could be either Local or Partner ("Is Local" Columns).
2. Creator of Output Streams is always Local.
3. Stream Item of Input Streams could be any Stream Item of this Stream, including "Total" or "4" ("Item Type" Columns).
4. Stream Item of Output Streams and Input/Output Safety Stock Stream could be any Stream Item of this Stream, except "Total" or "4" ("Item Type" Columns).
5. ALL 5 Expected Arrival Streams and Safety Stock Stream are optional.
6. All Output Streams are optional, however, at least one Output Stream must be specified.

7. Input Inventory Stream and Output Projected Inventory Stream could be mapped to the same Data Stream.
8. No Output Stream can be mapped to the same Data Stream as any other either Input or Output Stream. The exception is rule 7.

Disaggregate Profile Loader/Extractor

The Disaggregate Profile Loader uses disagprofile.template.

Table A–27 Disaggregate Profile Loader Field Definitions

Column	Description	Value
Creation Date	Creation date of the Disaggregation Profile	yyyyMMdd or yyyyMMddHHmmss
User Name	The name of the User who created the Disaggregation Profile	Up to 40 alphanumeric characters
Creator Company ID	Company ID of the creator company.	DUNS number (Format: Up to 40 characters)
Creator Location ID	The location ID of the creator company.	DUNS + 4 or Local ID (Format: Up to 40 characters long)
Creator Aggregate Type	0 for leaf, 1 for SUM	0, (IF Location ID=DUNS +4); 1, (IF Location ID = Local ID)
Partner Company ID	Your trading partner's company ID.	DUNS number (Format: 10 character Numeric)
Partner Location ID	Your trading partner's location ID.	DUNS +4 number OR Local ID. In case of Local ID, the Partner company ID should be same as Creator Company ID. (Format: Up to 40 characters.)
Partner Aggregate Type	0 for leaf, 1 for SUM	0, (IF Location ID=DUNS +4) ; 1, (IF Location ID = Local ID)
Global Item Number	The product's ID or Local ID.	Up to 40 character alphanumeric
Product Aggregate Type	0 for leaf, 1 for SUM	LEAF, if Global Item Number; SUM, If GIN=Local ID
Source Stream Type	Stream type code from which factors data is computed.	Valid Stream type code (Integer)
Source Stream Item Type	The stream Item type code from which factors data is computed.	1 for base, 2 for promo, 3 for seasonal, 4 for total
Source Is Local	Source is Local	1 for True, 0 for false
Target Stream Type	The stream type code for which the profile is created.	Valid Stream type (Integer)
Target Stream Item Code	The stream Item type code for which the profile is created.	1 for base, 2 for promo and 3 for seasonal.
Effective Period Begin	The date from which the Disaggregate Profile Factors should be effective.	YYYYMMDD Format

Table A-27 (Cont.) Disaggregate Profile Loader Field Definitions

Column	Description	Value
Effective Period End	The date after which the Disaggregate Profile Factors should not be effective.	YYYYMMDD Format. It should be > Effective Period Begin
Is Rolling	1 for rolling period; 0 for fixed period.	False, 0 / TRUE, 1
Rolling Period Begin	If Disaggregate Profile Factors is based on Rolling Period, enter the number of the period at which the Disaggregate Profile Factors starts.	Current Period = 0, one period before current = -1, and one period after current = 1. (Format:numeric). Leave this column blank when you set "Is Rolling to "0".
Rolling Period End	The number of periods the Disaggregate Profile Factors carries into the future.	Current Periods = 0, one period before current = -1, and after = 1. (Format:numeric). Leave this column blank when you set "Is Rolling to "0". It should be > Rolling Period begin
Fixed Begin Date	The data starts date for computing factors .	YYYYMMDD Format
Fixed End Date	The data ends date for computing factors.	YYYYMMDD Format. It should be > than Fixed Begin Date

Sample Datafile for Disaggregate Profile Loader:

```
//CONTEXT ON AGG - ROLLING POSITIVE
```

```
111,111-005,0,222,222-005,0, Prod_Test3,1,20020204, 20020210,17,1,1,2,1,1,0,3,,
```

```
111,111-005,0,111,PartLoc_Test3,1, 0005,0,20020204, 20020210,17,1,0,2,1,1,0,3,,
```

```
111,Loc_Test3,1,222,222-005,0, 0005,0,20020204, 20020210,17,1,1,2,1,1,0,3,,
```

```
111,Loc_Test3,1,111,PartLoc_Test3,1, Prod_Test3,1,20020204, 20020210,17,2,1,2,1,1,0,3,,
```

```
//CONTEXT ON AGG - FIXED PERIODS
```

```
111,111-006,0,222,222-006,0, Prod_Test3,1,20020204,
20020210,17,1,1,35,1,0,,,20021228,20030125
```

```
111,111-006,0,111,PartLoc_Test3,1, 0006,0,20020204,
20020210,17,1,1,2,1,0,,,20021228,20030125
```

```
111,Loc_Test3,1,222,222-006,0, 0006,0,20020204,
20020210,17,1,0,2,1,0,,,20030128,20030225
```

```
111,Loc_Test3,1,111,PartLoc_Test3,1, Prod_Test3,1,20020204,
20020210,17,2,1,2,2,0,,,20030110,20030130
```

Disaggregate Profile Factors Extract

Table A-28 Disaggregate Factors Extractor Field Definitions

Column	Description	Value
Creation Date	Creation date of the Profile factors	yyyyMMdd or yyyyMMddHHmmss
User Name	The name of the User who created the Disaggregation Profile Factors	Up to 40 character alphanumeric.
Creator Company ID	Company ID of the creator company.	DUNS number (Format: Up to 40 characters.)
Creator Location ID	The location ID of the creator company.	DUNS + 4 or Local ID (Format: Up to 40 characters.)
Creator Aggregate Type	0 for leaf, 1 for SUM	0, (IF Location ID=DUNS +4); 1, (IF Location ID = Local ID)
Partner Company ID	Your trading partner's company ID.	DUNS number (Format: 10 character Numeric.)
Partner Location ID	Your trading partner's location ID.	DUNS +4 number OR Local ID. In case of Local ID, the Partner company ID should be same as Creator Company ID. (Format: Up to 40 characters.)
Partner Aggregate Type	0 for leaf, 1 for SUM	0, (IF Location ID=DUNS +4) ; 1, (IF Location ID = Local ID)
Global Item Number	The product's ID or Local ID.	Up to 40 character alphanumeric.
Product Aggregate Type	0 for leaf, 1 for SUM	LEAF, if Global Item Number; SUM, If GIN=Local ID
Source Stream Type	Stream type code from which factors data is computed.	Valid Stream type code (Integer)
Source Stream Item Type	The stream Item type code from which factors data is computed.	1 for base, 2 for promo, 3 for seasonal, 4 for total
Source is Local	Source is Local	1 for True, 0 for false
Target Stream Type	The stream type code for which profile factors exist.	Valid Stream type (Integer)
Target Stream Item Type Code	The stream Item type code for which profile factors exist.	1 for base, 2 for promo and 3 for seasonal.
Effective Period Begin	The date from which the Disaggregate Profile Factors should be effective.	YYYYMMDD Format
Effective Period End	The date after which the Disaggregate Profile Factors should not be effective.	YYYYMMDD Format. It should be > Effective Period Begin
Is Rolling	1 for rolling period; 0 for fixed period.	False, 0 / TRUE, 1
Rolling Period Begin	If Disaggregate Profile Factors is based on Rolling Period, enter the number of the period at which the Disaggregate Profile Factors starts.	Current Period = 0, one period before current = -1, and one period after current = 1. (Format:numeric).

Table A-28 (Cont.) Disaggregate Factors Extractor Field Definitions

Coulumn	Description	Value
Rolling Period End	The rolling end period.	Current Periods = 0, one period before current = -1, and after = 1. (Format: numeric). Leave this column blank when you set "Is Rolling to "0". It should be > Rolling Period begin.
Fixed Begin Date	The data starts date for computing factors .	YYYYMMDD Format
Fixed End Date	The data ends date for computing factors.	YYYYMMDD Format. It should be > than Fixed Begin Date
Numerator	Numerator of the context factors.	Valid Integer
Denominator	Denominator of the context factors.	Valid Integer
Factor Creator Company	The company ID of the Factor creator company.	DUNS number (Format: 10 character Numeric)
Factor Creator Location ID	The location ID of the Factor creator company.	DUNS + 4 (Format: 10 character numeric)
Factor Partner Company	The company ID of the Factor Partner company.	DUNS number (Format: 10 character Numeric)
Factor Partner Location ID	The location ID of the Factor Partner company.	DUNS + 4 (Format: 10 character Numeric)
Factor Global Item Number	The Global Item Number.	Up to 40 character alphanumeric.
Factor	Factor for the collaboration Item.	Valid fractional value

Troubleshooting Integrator Data Loading

This appendix contains the following topics:

- [Troubleshooting an Integrator Data Load](#)
- [Reloading Rejected Data Streams](#)

Troubleshooting an Integrator Data Load

When you run the Integrator, the VCC Integrator screen appears detailing the progress of the data load. The screen contains several tabs, namely:

- Load Summary -- provides an overview of the data load.
- Parser Manager -- reports the status of a data file being segmented into file units for processing.

Note: If there are database errors, refer to the filename.db_errors file in the directory configured for completed files.

The Load Summary tab provides an overview of the data load. This is the first place to look when monitoring a data load. It lets you know if any control files, data files, file units, or data items were rejected. Large files are segmented into file units for efficient processing. Each file unit can be up to 100K.

Load Summary tab

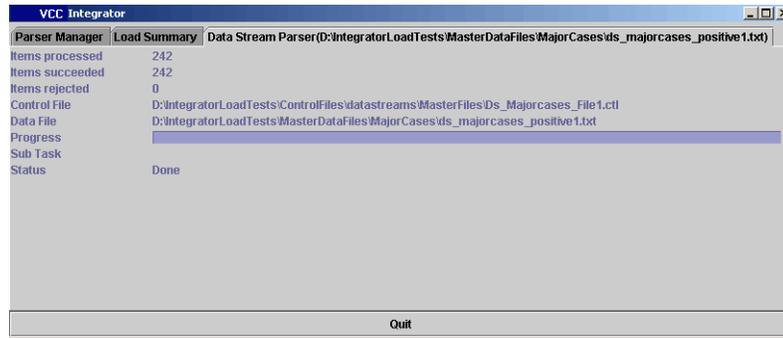
VCC Integrator	
Parser Manager	Load Summary
Data Stream Parser(D:\IntegratorLoadTests\MasterDataFiles\MajorCases\ds_majorcases_positive1.txt)	
Control Files	1
Control Files Rejected	0
Data Files	1
Data Files Rejected	0
File Units	1
File Units Rejected	0
Data Items	242
Data Items Rejected	0
Status	Done

Quit

If there are problems with a data load, you should use the VCC Monitor screen to troubleshoot the problem. When troubleshooting errors, start at the highest level and drill down as required to determine the error. First, look at the control file, followed by

the data file, then the file units that comprise a large data file and, finally, configuration issues. A control file, a data file, or a file unit can be rejected outright or they can report that they contain rejected items. A control file contains data files, data files contain file units, and file units contain individual records.

Filewise Details tab



Also, if you are running in batch mode check the completion code in the DOS window. If you are not running in batch mode, the completion codes are in the **summary.xml** file. The completion codes are:

- 4 -- COMPLETED_NO_REJECTS_NO_ERRORS
- 5 -- COMPLETED_WITH_REJECTS_NO_ERRORS
- 6 -- COMPLETED_NO_REJECTS_WITH_ERRORS
- 7 -- COMPLETED_WITH_REJECTS_WITH_ERRORS
- 8 -- APPLICATION ERROR

In the summary.xml file, look for the following to determine the completion code:

```

component cname="Integration_adaptor" root="h:smit:1007660951341" sid="-1">
<params mode="rewriteable">
<EndTime>Thu, December 06, 2001 12:49:31 PM EST</EndTime>
<BriefSummary>Completed: No Errors, With Rejects</BriefSummary>
<StartTime>Thu, December 06, 2001 12:49:12 PM EST</StartTime>
<RunningTime>21(seconds)</RunningTime>
<LogFile>D:\Synkra\integrator\output\adaptor.log</LogFile>
<CompletionCode>5</CompletionCode>
<ConfigurationFile>adaptor.template</ConfigurationFile>
</params>
</ component>
    
```

This is path to final (resulting) completion code:

```
localhost/connection_point/application/params/component[@cname="Integration_
adaptor"]/params/CompletionCode
```

For example, you should look in the following order for errors:

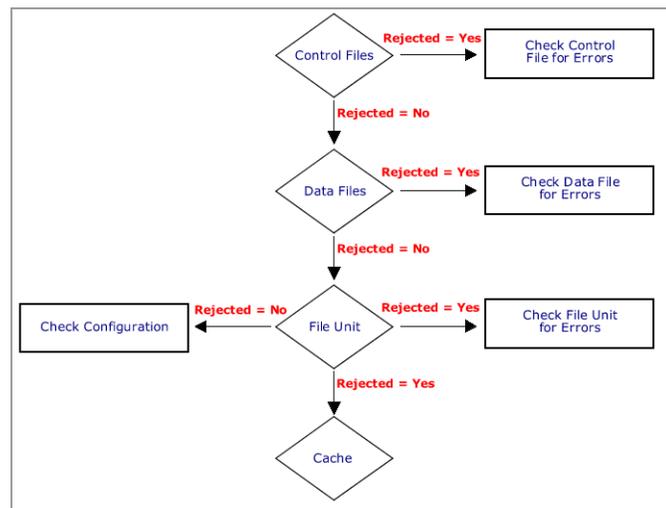
1. Were any errors generated? If so, determine what was rejected by looking for reject files in the Integrator archive directory. Errors can occur in at the Integration

adaptor level (adaptor.log), the control file, the file(s) loaded, the file units that comprise the file(s), and configuration problems.

2. Check the overall completion code for the Integration Adaptor in the generated summary.xml file.
3. Check for control file errors and check its completion code. When you monitor the control file for errors, the control file itself can be rejected or the control file can contain files that were rejected.
4. Check the file units for errors and check their completion codes. When you monitor file units for errors, the file unit itself can be rejected or the file unit can contain cache items (location, product, partner, period) that were rejected.
5. If there were no errors in any file units, check your configuration settings including your application configuration; system runtime environment configuration; load configuration.

The figure below illustrates the process for troubleshooting data loads:

Troubleshooting Data Loads



Following these steps, you should be able to locate most errors. To perform these steps, use the Monitor screen.

To access the Monitor screen:

1. Log in to VCC as an administrator or superuser.
2. Select Monitor from the VCC menu and click the Jobs tab on the Monitor screen. If your loader job contained only one control file or multiple control files for the same loader type, see a job listing for your loader type (for example, "Int - Load Stream Data"). If your loader job contained multiple control files for various loader types, see job listing Int - Multiple Loads.
3. Optionally, select a filter from the Filter drop-down list and enter filter information to filter the jobs in the display.

Jobs Usage Current Connections Server Locks

Search: None Mark entries before: 09/09/03 (mm/dd/yy)

Displaying 1-20 of 172

User Name	Company	Job ID	Job Name	Start Time	End Time	Status	
superuser	All Companies	508	N/A	09/03/03 12:12:23	09/03/03 12:12:23	Completed	
integratoruser	All Companies	499	Extract Metrics	09/03/03 10:55:35	09/03/03 10:55:36	Completed	
integratoruser	All Companies	498	Extract Master Data	09/03/03 10:55:31	09/03/03 10:55:35	Completed	
integratoruser	All Companies	497	Process Extract Requests	09/03/03 10:45:29	09/03/03 10:45:36	Completed	
integratoruser	All Companies	496	Extract Metrics	09/03/03 10:45:35	09/03/03 10:45:36	Completed	
integratoruser	All Companies	495	Extract Master Data	09/03/03 10:45:31	09/03/03 10:45:34	Completed	
integratoruser	All Companies	494	Process Extract Requests	09/03/03 10:45:29	09/03/03 10:45:36	Completed	
integratoruser	All Companies	493	Extract Metrics	09/03/03 10:35:56	09/03/03 10:35:57	Completed	
integratoruser	All Companies	492	Extract Master Data	09/03/03 10:35:44	09/03/03 10:35:56	Completed	
integratoruser	All Companies	491	Process Extract Requests	09/03/03 10:35:42	09/03/03 10:35:57	Completed	
superuser	All Companies	490	Process Leaf Exceptions	09/03/03 10:35:01	09/03/03 10:35:15	Completed	
integratoruser	All Companies	489	Extract Master Data	09/03/03 10:34:23	09/03/03 10:34:23	Completed	
integratoruser	All Companies	488	Process Extract Requests	09/03/03 10:31:05	09/03/03 10:31:10	Completed	
integratoruser	All Companies	468	Int - Extract Stream Data	09/02/03 09:32:21	09/02/03 09:58:33	Aborted	
<input type="checkbox"/>	Dave Wilson	Nabisco	459	Process Reports On Demand	08/29/03 21:50:58	08/29/03 21:52:28	Completed
<input type="checkbox"/>	Dave Wilson	Nabisco	458	Process Reports On Demand	08/29/03 21:07:56	08/29/03 21:09:17	Completed
<input type="checkbox"/>	Dave Wilson	Nabisco	457	Process Reports On Demand	08/29/03 20:08:11	08/29/03 20:10:08	Completed
<input type="checkbox"/>	Dave Wilson	Nabisco	456	Process Reports On Demand	08/29/03 20:01:36	08/29/03 20:02:39	Completed
<input type="checkbox"/>	Dave Wilson	Nabisco	455	Process Reports On Demand	08/29/03 19:49:55	08/29/03 19:50:04	Completed
<input type="checkbox"/>	Dave Wilson	Nabisco	454	Process Reports On Demand	08/29/03 19:41:01	08/29/03 19:42:19	Completed

1 2 3 4 5 6 7 8 9 10

- Click the link under the Job ID column for the job you want to troubleshoot. The Details screen for that job appears.
- The Details screen displays a viewable and expandable version of the integration_timestamp_summary.xml file located in the Integrator done directory. It contains several expandable categories.

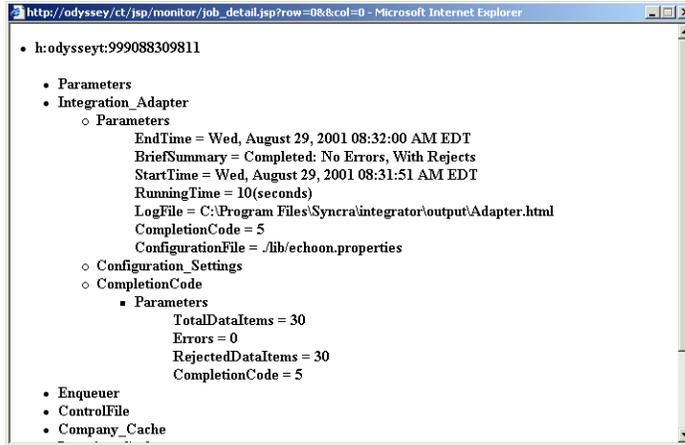
VCC Integrator

Parser Manager Load Summary Data Stream Parser(D:\IntegratorLoadTests\MasterDataFiles\MajorCases\ds_majorcases_positive1.txt)

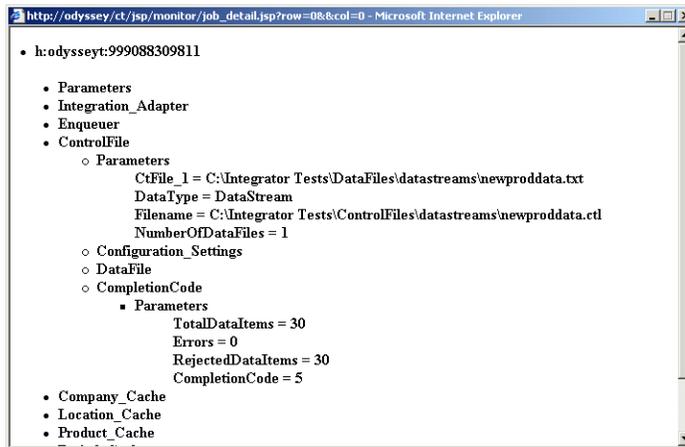
Control Files	1
Control Files Rejected	0
Data Files	1
Data Files Rejected	0
File Units	1
File Units Rejected	0
Data Items	242
Data Items Rejected	0
Status	Done

Quit

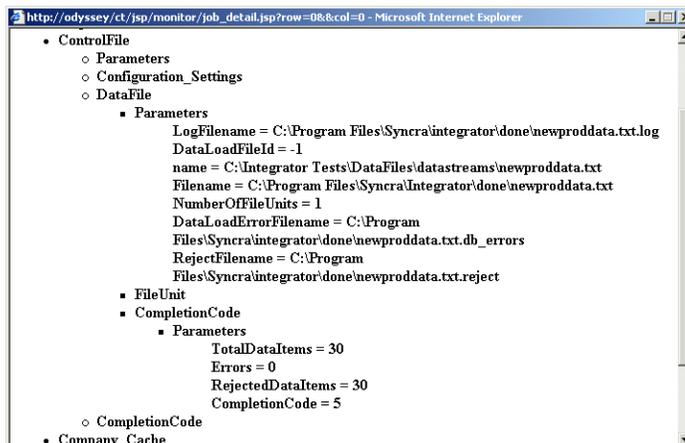
- The first category to expand and troubleshoot is Integration_Adaptor to determine if any errors occurred during the load. It contains the Parameters category and the Configuration_Settings category. View the Parameters category and check the CompletedCode and BriefSummary field to see if any errors were generated.



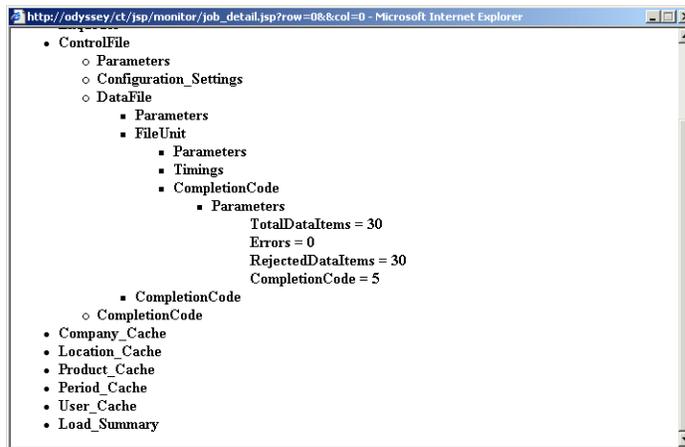
7. If errors were reported, check the control file for errors by expanding Control File - CompletionCode - Parameters. The fields to note here are CompletedCode , RejectedDataItems .



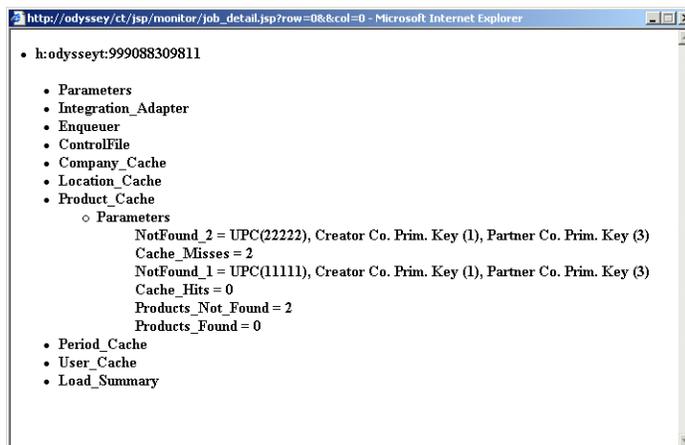
8. To check the files loaded, expand Control File - DataFile - Parameters and Control File - DataFile - CompletionCode - Parameters. Depending on the number of files processed, there may be more than one file. The fields to note are the CompletionCode, RejectedDataItems, RejectedFileName fields.



9. If there are no problems with the file, check the file unit. Large files are segmented into 100K file units for efficient processing. To check the file unit, select **Control File - DataFile - File Unit - CompletionCode -Parameters** .



10. If the file unit contains errors, check the **Company_Cache - Parameters, Location_Cache - Parameters, Product_Cache - Parameters, Period_Cache - Parameters, and User_Cache - Parameters** for errors.



11. If you could not determine errors in the control file, data file, or file units, check the application configuration settings by selecting **Integration Adapter - Configuration Settings - Parameters**. The field to note are **CtServerHost, database.username, database.url, database.oracle.servicename**. These are all VCC configuration settings you can access through **VCC - VCC Configuration - VCC Configurations**.
12. Check runtime configuration settings by expanding Parameters. Fields to note are **java.vm.version, java.security.policy, java.class.path, and java.version**.

Reloading Rejected Data Streams

As previously mentioned, a rejected data stream is moved to the Integrator *done* directory (or whatever directory you have configured as the archive directory) and named:

`forecast_file_name.error_code.reject`

where **error_code** can be:

- Creator Company Not Found = 500
- Partner Company Not Found = 501
- Product Not Found = 502
- Creator Location Not Found = 503
- Partner Location Not Found = 504
- Period Not Found = 505
- Collaboration Item Not Found = 506

If an error occurs to which an error code does not apply, the file is named

forecast_file_name.reject

Note: If there are database errors, refer to the filename.db_errors file in the Syncra archive directory.

Once you have corrected the problem, you can reload the reject file. It contains only the items rejected.

To reload the file, follow the steps below:

1. Move the **forecast_file_name.error_code.reject** file or the **forecast_file_name.reject** file to your file group directory.
2. Turn create **Collaboration Items** on in the **Integrator Configuration** screen. To do this, select VCC - VCC Configurations - VCC Control File Configuration from the Syncra program group. Check the Collaboration Items box, as shown below, and click Save. This will automatically create the collaboration item for the product you created when you run the Integrator.
3. Load the **forecast_file_name.error_code.reject** or the **forecast_file_name.reject** using the Integrator.

If the reject file itself is rejected, it is placed in the archive directory with the name

forecast_file_name.error_code.reject.reject

or

forecast_file_name.reject.reject

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