

V3 Upgrade Service

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Agenda

- Pre V3 Upgrade, a 60 Sec History
- V3 Upgrade, the New Model
- Compatibility Requirements
- Service API and Example
- Supported Domain Versions
- Schedule and Reporting
- Test Domains
- More Information
- Q & A



Pre V3 Upgrade

- Pre V3 Upgrade tool replicates the domain configuration of a previous server version to the current server version.
 - Translates the domain.xml
 - Redeploys applications
 - Misc
 - > Upgrade report (upgrade.log)
 - Success
 - Failures
 - Flagged user intervention requirements (e.g. VM options that are not transferred)



V3 Upgrade

- Each Module will implement a service that will upgrade the domain configuration to its requirements of the V3.
- Each service will report success, failures, and flag user intervention requirements to the log. (log-service TBD)
- The server will call each component's service in some predefined order (TBD).
- New CLI option, --upgrade added to cmd start-domain
- Upgrade tool
 - Clone the domain of a previous server version
 - Copy user provided JARs to the V3 lib directory
 - Exec start-domain with the option --upgrade
 - Report the logged results to the user



Compatibility Requirements

- Common changes that break version backward compatibility
 - Changing the signature of methods in a public API
 - Changing the structure of key configuration files. (domain.xml)
 - > Changing the meaning of configuration file data in a significant way.
 - Moving the location of a prefined file and not adding a rule to look in the old location.
 - Changing of default database usually means some revision is needed to the domain.xml data.
 - Changes to auto-generated code (APIs in JSP code generation)

^{*} http://wiki.glassfish.java.net/Wiki.jsp?page=UpgradeCompatibilityRequirements



Service API

In glassfish-api module:

package org.glassfish.api.admin.config.ConfigurationUpgrade

```
/**

* Contract for services which want to perform some upgrade on the

* application server configuration

* @author Jerome Dochez

*/

@Contract
public interface ConfigurationUpgrade {

// this is a tag contract, implementation should just implement a

// postConstruct method to perform upgrade on injected configuration data
}
```



Service Example

In kernal-classes module:

package com.sun.enterprise.v3.services.impl.UpgradeLogging.java @Service public class UpgradeLogging implements ConfigurationUpgrade, PostConstruct { @Inject (name="server-config") Config config; @Inject LoggingConfigImpl logConfig; // continued...



Service Example (cont)

```
// Code condensed for slide
public void postConstruct() {
  // v3 uses logging.properties to configure the logging facility.
  // move all log-service elements to logging.properties
  final LogService logService = config.getLogService();
  if (logService == null) return;
  // get log levels and add to map
  // apply changes
  ConfigSupport.apply(new SingleConfigCode<Config>() {
     public Object run(Config c) throws PropertyVetoException, TransactionFailure {
       logConfig.updateLoggingProperties(logLevelMap);
       c.setLogService(null);
  }, config);
```

complex example: admin/config-api GrizzlyConfigSchemaMigrator.java



Running the Service

asadmin start-domain --upgrade --user admin

-- domaindir /sgesv2/domains/domain1

asupgrade -c

asupgrade -help v3/extras/upgrade/upgrade-jar/README



Supported Domain Versions

- AS9.1 Developer Profile
- AS9.1 ur1 Developer Profile
- AS9.1 ur2 Developer Profile
- SGES v2.1 Developer Profile
- SGES v2.2 Developer Profile
- V3-Prelude



Schedule and Reporting

- Milestone # (TBD)
 - > Soft code freeze TBD
 - > Hard code freeze TBD

Dashborad Wiki Page:

http://wiki.glassfish.java.net/Wiki.jsp?page=V3UpgradeDashboard



Test Domains

https://securewiki.sun.com/display/gfupgrade/EngTestDomains

- domain1 as created at install time (V2.1)
 - > SPARC
 - > WinXP
 - > Mac
- seam-2.1.1 jpa domain (V2.1)
 - > SPARC
 - > WinXP
 - > Mac



More Information

- Dashborad Wiki Page:
 - http://wiki.glassfish.java.net/Wiki.jsp?page=V3UpgradeDashboard
- Upgrade Compatibility Requirements:
 - http://wiki.glassfish.java.net/Wiki.jsp?page=UpgradeCompatibilityRequirements
- V3 Upgrade Tool Spec: http://wiki.glassfish.java.net/Wiki.jsp?page=V3FunctionalSpecs
- Discussion alias: dev@glassfish.dev.java.net
- Upgrade Tool alias: gfv3upgrade-team@sun.com



Q&A

14