

Governance, Risk, and Compliance Controls Suite

Hardware and Sizing Recommendations

Software Version 7.2

ORACLE®

GRC Controls Suite Hardware and Sizing Recommendations

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Hardware and Sizing Recommendations

Oracle Governance, Risk, and Compliance Controls Suite implements business controls, enabling users to demonstrate regulatory compliance and to promote operational efficiency. Three GRC Controls Suite applications — Application Access Controls Governor, Transaction Controls Governor, and Preventive Controls Governor — run both in a common platform and in “Embedded Agents” that enable the platform to apply controls in the Oracle E-Business Suite.

Platform

Governance, Risk, and Compliance Controls Suite relies for its reporting capability on Business Objects XI Release 2. The common platform for the GRC Controls Suite applications may be considered to consist of two tiers — a web tier (the GRC Controls Suite web application) and a reporting tier (the Business Objects application). Each is supported by its own Oracle 9i (or later) database, and these two may be considered to form a database metadata tier.

Typically, the web and reports tiers run on a single dedicated server. GRC Controls Suite can run on Solaris 8, 9, or 10, Red Hat Enterprise Linux 4.0, Red Hat Advanced Server 4.0, Windows 2000, or Windows 2003. (For detailed information about supported patch levels, see the Installation Guide for the GRC Controls Suite.)

GRC Controls Suite Web Tier

The web tier requires a J2EE 1.4 compliant Application Server for the GRC Controls Suite web-based console and a Business Objects web-based report management portal integrated with GRC Controls Suite. Apache Tomcat 5.0 is the only supported application server, and it is bundled with the GRC Controls Suite installation.

The web tier requires approximately 4 gigabytes (GB) of file system space and in general requires a minimum of 2 GB of memory.

GRC Controls Suite Reporting Tier

The reporting tier is provided via the Business Objects Enterprise technology stack. These components are automatically installed during the GRC Controls Suite installation.

The reporting tier requires a minimum of 20 GB of dedicated file system space for storing report instances, and at least 6 GB of temporary space for processing reports. The reporting tier uses the same 2 GB of memory allotted to the web tier.

GRC Controls Suite Metadata Tier

For the metadata tier, each of the GRC Controls Suite web application and the Business Objects reporting application requires an Oracle 9i (or later) database.

Consult your Oracle database documentation for file system requirements. The only requirements determined by GRC Controls Suite are 1.5 GB of dedicated table space for the GRC Controls Suite-related metadata repositories and at least 1 GB of system global area (SGA). See “GRC Controls Suite Database Sizing” (page 3) for more details on Oracle database sizing.

Hardware Recommendation

Therefore, in summary, the following are the server requirements for a single-node installation of Governance, Risk, and Compliance Controls Suite:

Tier	Memory (GB)	Storage (GB)
Web	2	4
Reporting	–	26
Metadata	1	1.5
Total	3	31.5

You are advised to use a dedicated server for running the GRC Controls Suite application. The following recommendation is based on the assumption that the web tier, reporting tier, and metadata tier all reside on a single physical server.

The dedicated server must satisfy the following minimum requirements:

- 3 GB of random access memory (RAM).
- 40 GB of space on mirrored SCSI disks. This includes 8 GB of space for a staging directory (used during installation), and it allows 4 GB for the GRC Controls

Suite web tier, 26 GB for the reporting tier, and an additional 2 GB for database metadata.

- Dual CPUs (Xeon preferred), 2.5 gigahertz (GHz) or faster.

GRC Controls Suite Database Sizing

Each of the web tier (the GRC Controls Suite web application) and the reporting tier (the Business Objects reporting application) requires its own metadata repository (Oracle 9i or later database).

- The web-tier repository stores objects created in GRC Controls Suite — items such as controls, other control-library elements, control monitors, and segregation of duties (SOD) data; user, group, and privilege data; and connection information for Oracle Applications instances. A table space of 1 GB and 500 megabytes (MB) of SGA are recommended for this repository.
- The reporting-tier repository stores Business Objects-specific user, group, and privilege data (which is maintained automatically by GRC Controls Suite), connection information for Oracle Applications instances, and report definitions and metadata. A table space of 500 MB and 500 MB of SGA are recommended for this repository.

Therefore, in summary, the following are the database-sizing requirements for a single-node installation of Governance, Risk, and Compliance Controls Suite:

Tier	Table Space (MB)	SGA (MB)
Web	1,000	500
Reporting	500	500

Sizing Requirements for Oracle Applications instances

The Embedded Agent applications are installed on the forms server and database server of each Oracle Applications instance that is to be controlled by GRC Controls Suite.

Ensure that your forms server has 100 megabytes (MB) of disk space for Embedded Agents files, and that the database server has 100 MB of disk space for Embedded Agents executable files.

Moreover, the Embedded Agents schema requires the following amounts of disk space:

- 100 MB for most Embedded Agents database tables.
- An additional 1 gigabyte (GB) for two temp tables used in Audit Rules processing — LAAD_AUDIT_KEYS and LAAD_AUDIT_VALUES.
- An additional amount for two tables that hold Application Access Controls Governor “user conflicts.” The space requirement varies according to the number of conflicts a system may generate. The first table, LAA_USER_CONFLICT_ENTITIES,

holds the most recent “snapshot,” or set of conflicts; the other, LAA_USER_CONFLICT_ENTITIES_H, is a history table that holds archived snapshots. So one would, in effect, want to allow for double the number of conflicts that may be generated. The largest clients generate approximately 5,000,000 conflicts and so need to allow for 10,000,000, and 2 GB of disk space meets this requirement.

Finally the APPS (Oracle Applications) schema requires space to encompass shadow tables used by Audit Rules — one-third of the space taken by each audited table.