

ACTIVE Governance™

Installation Guide for Linux and UNIX Servers

Software Version 7.1

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ACTIVE Governance Installation Overview

ACTIVE Governance both documents and enforces business controls, enabling users to demonstrate regulatory compliance and to promote operational efficiency. An ACTIVE Governance instance necessarily includes an ACTIVE Governance Platform, which offers documentary and reporting capability, and may include up to three modules that provide enforcement capability — ACTIVE Access Governor™, ACTIVE Policy Governor™, and ACTIVE Data Governor™.

Although ACTIVE Governance runs in a web browser, it works in concert with AppsRules, a LogicalApps product that runs within the Oracle Applications ERP environment. Some AppsRules applications serve as “engines” for ACTIVE Governance and would not typically be used directly. Others serve as “embedded agents” within Oracle Applications and can be used directly.

Thus, before you can install ACTIVE Governance, you must have installed Oracle Applications; versions 11.5.8, 11.5.9, and 11.5.10 are preferred, but versions 11.5.3–11.5.7 are also supported. You must also have installed AppsRules version 7.1; see the *AppsRules Installation Guide*.

Each of these applications connects to its own database. Typically these are installed as distinct schemas in an Oracle database, with APPS the conventional name for the Oracle Applications schema, and XXLAAPPS the conventional name for the AppsRules schema.

ACTIVE Governance also works in concert with Business Objects, a third-party software package that provides its reporting capability. Thus the process of installing ACTIVE Governance itself involves placing ACTIVE Governance and Business

Objects files (as well as a Java application server) on a UNIX or Linux server; using Business Objects tools on a Windows client to deploy reports; and completing permissions, licensing, and other configuration steps on the server.

Each of ACTIVE Governance and Business Objects also requires its own database. ACTIVE Governance uses an Oracle 9i database; Business Objects may use MySQL 4.1 or Oracle 9i.

Intended Audience

This guide is intended for readers qualified to perform system-administration operations such as configuration change at the operating-system level, the creation of users, the granting of permissions to users and directories, or the installation of operating system patches on the machine that hosts ACTIVE Governance.

Supported Operating Systems

ACTIVE Governance can run under any of the following operating systems:

Red Hat Enterprise Linux 3.0. Minimum operating system installation plus Update 3 or greater. Higher patches are supported.

Red Hat Enterprise Linux 4.0. Minimum operating system installation.

SUSE Linux Enterprise Server 9.0. Minimum operating system installation plus XFree86-4.3.99.902-43.22.i586.rpm, XFree86-libs-4.3.99.902-43.22.i586.rpm. Higher patches are supported.

SUSE Linux Enterprise Server 10.0. Minimum operating system installation. Higher patches are supported.

Solaris 8. Minimum operating system installation plus the following packages:

- SUNWgzip
- SUNWzlib
- SUNWscpu
- SUNWbash
- SUNWbcp
- SUNWxcu4 (XCU4 Utilities)
- SUNWxwfont
- SUNWxwplt
- SUNWlibC
- SUNWeuluf (UTF-8 L10N For Language Environment User Files)
- SUNWuiu8 (Iconv modules for UTF-8 Locale)

- SUNWulcf (UTF-8 Locale Environment Common Files)
- SUNWmfrun
- SUNWxwice
- Solaris 8 Recommended Patch Cluster including:
 - kernel patch, 108528-24 or higher
 - C++ run-time, 108434-13 or higher
 - linker patch, 109147-26 or higher
 - Misc loc have errors in CTYPE and lv colln monetary, 109778-13 or higher
 - gzip patch, 112668-01 or higher
 - libz patch, 112611-02 or higher
 - tar patch, 110951-04 or higher
 - sh family patch, 109324-05 or higher
 - en_UTF-8 patch, 114059-02 or higher
- Additionally, thread, c and other library patch, 108993-32 or higher. Note that patch 108993-32 require the following to be installed first:
 - mntfs patch 111023-03
 - init patch 111317-05
 - mount patch 113648-03
 - netstrategy patch 115827-01
 - uadmin patch 116602-01

Solaris 9. Minimum operating system installation plus the following packages:

- SUNWgzip
- SUNWzlib
- SUNWscpu
- SUNWbash
- SUNWbcp
- SUNWxcu4(XCU4 Utilities)
- SUNWxwfnt
- SUNWxwplt
- SUNWlibC
- SUNWeu8os (American English/UTF-8 L10N For OS User Files)
- SUNWeuluf (UTF-8 L10N For Language Environment User Files)
- SUNWuiu8 (Iconv modules for UTF-8 Locale)

- SUNWulcf (UTF-8 Locale Environment Common Files)
- SUNWmfrun
- SUNWxwice
- Solaris 9 Recommended Patch Cluster including:
 - kernel patch, 112233-11 or higher
 - libc, 112874-16 or higher
 - C++ run-time, 111711-06 or higher
 - linker patch, 112963-10 or higher
 - zlib patch, 115754-02 or higher
 - Higher patches are supported.
 - November 2003 C++ Runtime PTF => x1C.aix50.rte 6.0.0.10 (Note that this PTF requires Runtime of Level 6.0.0.0 to be installed prior to installing the PTF)
 - Higher patches are supported

Solaris 10. Minimum operating system installation plus the following packages:

- SUNWgzip
- SUNWzlib
- SUNWscpu
- SUNWbash
- SUNWbcp
- SUNWxcu4 XCU4 Utilities
- SUNWxwfont
- SUNWxwplt
- SUNWlibC
- SUNWeu8os American English/UTF-8 L10N For OS Environment User Files
- SUNWeuluf UTF-8 L10N For Language Environment User Files
- SUNWuiu8 Iconv modules for UTF-8 Locale
- SUNWulcf UTF-8 Locale Environment Common Files
- SUNWmfrun
- SUNWxwice

Higher patches are supported by Logical Apps.



Note

If you use Solaris 10, you will use Business Objects R2; if you use any of the other operating systems supported by ACTIVE Governance 7.1, you will use Business Objects R1.

Hardware Requirements

To run ACTIVE Governance and Business Objects, a UNIX or Linux server should meet the following requirements:

- Random-access memory (RAM): 4 gigabytes (GB)
- Hard-disk space: For a single-node installation, 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 an ACTIVE Governance web tier, 26 GB for the Business Objects reports tier, and an additional 2 GB for a “metadata” tier.

If you use Red Hat Enterprise Linux 3.0 or SUSE Linux Enterprise Server 9.0, your system must have at least Dual CPU (Xeon preferred), 2.5 GHz or faster.

If you use Solaris 8 or 9, your system must have at least SPARC v8plus.

ACTIVE Governance Platform requirements for the application server and database include the following:

- Database: 500 MB of storage for tables for the ACTIVE Governance schema.
- 2 GB of disk space reserved for temporary data generated by segregation-of-duties analytics. (This is in addition to the 40 GB of space noted above, but because it is space shared by all databases that run on a server, you may already have allowed for it.)

Software Requirements

Oracle Applications versions 11.5.8, 11.5.9, and 11.5.10 are preferred. Versions 11.5.3–11.5.7 are also supported.

Oracle Client version 9.2.0.1 or greater is required for connectivity among various Oracle databases.

ACTIVE Governance requires an Oracle 9i database. Business Objects may use an Oracle 9i or MySQL 4.1 database, and the latter is bundled with the installation.

Apache Tomcat 5.0 is the only supported application server. It is bundled with the installation.

The following web browsers may be used to display the ACTIVE Governance client:

- Internet Explorer 5.5
- Internet Explorer 6.0

Installing Server Components

After Oracle Applications and AppsRules are installed, begin to install ACTIVE Governance: Complete several preparatory steps, then download installation files to a staging directory. After using the files to install “infrastructure” — which includes ACTIVE Governance and Business Objects components, including a MySQL database and Tomcat application server for use with Business Objects — configure the Business Objects server and then install the ACTIVE Governance schema.

Preparing to Install

Before installing ACTIVE Governance, complete the following steps:

- 1 Ensure that an Oracle database exists for use by ACTIVE Governance, and create a database user for it; the recommended name is `XXLAAPPS_AG`. If you do not intend to use MySQL, do the same for Business Objects; the recommended user name is `XXLAAPPS_BO`. Ensure that these users have the `CONNECT` and `RESOURCE` roles, and that these roles are set to `DEFAULT`.
- 2 Determine the following values, which you will need during the installation:
 - The host name of the SMTP server your company uses for sending email.
 - The host name, port number, SID, user (schema) name, and password for the ACTIVE Governance database.
 - The host name, port number, SID, user (schema) name, and password for the database used by an Oracle Applications instance in which AppsRules has been installed to run.

- 3** Ensure that the machine to be used as the ACTIVE Governance host does not run Business Objects. (You cannot run two Business Objects installations on a single host.) To check, run the following command:

```
ps -ef | grep bobje
```

The grep process should be the only one with “bobje” in it. Any others would indicate that an instance of Business Objects is running.
- 4** If you intend to use MySQL as the Business Objects database, ensure that MySQL is not already running on the ACTIVE Governance host.
- 5** Determine whether ports 3306, 6400, 8005, 8080, and 8443 are available on the ACTIVE Governance host. (The installation procedure uses these ports by default. If any are already in use, you’ll need to substitute for them during installation. Port 3306 is of concern only if you intend to use MySQL as the Business Objects database.)
- 6** Install Oracle Client 9.2.0.1 or greater, if it is not already installed (see below).
- 7** Create a LogicalApps user on the host Linux or UNIX operating system. The recommended name is lapps. The user need not belong to any group.
- 8** Create the following directories on the ACTIVE Governance host. Ensure that the LogicalApps user owns these directories and has read and write permissions to them.
 - A base directory. In this document, the name \$LAPPS_BASE represents the full path to this directory (for example, /opt/lapps).
 - A staging directory, which is an immediate subdirectory of \$LAPPS_BASE. In this document, the name \$LAPPS_STAGE represents the full path to this directory (for example, /opt/lapps/stage).
 - A home directory, which is an immediate subdirectory of \$LAPPS_BASE. In this document, the name \$LAPPS_AG_HOME represents the full path to this directory (for example, /opt/lapps/ag).
 - Temporary directories: \$LAPPS_BASE/tmp and \$LAPPS_BASE/tmpdir. These could be links to any designated temporary directory on the host.

Installing Oracle Client

Oracle Client 9.2.0.1 or greater must be installed on the server that hosts ACTIVE Governance, enabling it to connect to Oracle databases that have the ACTIVE Governance, AppsRules, and (if you do not use MySQL) Business Objects schemas. Refer to Oracle documentation for further details on Oracle Client installation.

In this document, ORACLE_HOME represents the entire path to the directory in which you have installed Oracle Client.

Open the file ORACLE_HOME/network/admin/tnsnames.ora. For each of the ACTIVE Governance, AppsRules, and (if appropriate) Business Objects databases, create an entry that specifies the host, dbport, and dbsid. Save the file.

Loading Files in the Staging Directory

To prepare the files you will use to install ACTIVE Governance:

- 1 From the site provided to you by LogicalApps Customer Support, download the following files to your `$LAPPS_STAGE` directory. (In the file names shown below, italicized placeholders stand for actual version, schema, and build numbers.)

```
ags_infrastructure_7_1_n_snn_bnn_.zip
ags_schema_install_7_1_n_bnn.zip
bo_setup_7_1_n_bnn_ga.zip
ora_pack_7_1_n_nn.zip
```

- 2 Extract the contents of the infrastructure file. Execute the following command, replacing the italicized placeholders with actual version, schema, and build numbers:

```
unzip ags_infrastructure_7_1_n_snn_bnn_.zip
```

- 3 Confirm that the extraction has created the following directories:

```
$LAPPS_STAGE/ags_infrastructure
$LAPPS_STAGE/ags_infrastructure/bobje
$LAPPS_STAGE/ags_infrastructure/post-install
```

Confirm that these files exist in the `$LAPPS_STAGE/ags_infrastructure` directory (with version, schema, and build numbers replacing the italicized placeholders):

```
ag.env
ag-install.sh
ag-services.sh
ag-setup.env
ags_7_1_n_snn_bnn_ga.war
```

- 4 Set execute permissions on `ag-install.sh` and `ag-services.sh`. Execute the following commands:

```
chmod +x ag-install.sh
chmod +x ag-services.sh
```

- 5 Using download links provided by LogicalApps Customer Support, download Business Objects Enterprise XI into `$LAPPS_STAGE/ags_infrastructure/bobje`.

Installing ACTIVE Governance Infrastructure

Installing the ACTIVE Governance infrastructure involves placing ACTIVE Governance, Business Objects, and Tomcat files on the server, configured so that they will connect to databases and other components. Depending on your setup, use one of two methods:

- If you use a Linux operating system *and* intend to use a MySQL database for Business Objects, set values in a properties file and then run an installation script.
- If you have any other configuration (if you use a UNIX operating system *or* you will use Oracle for the Business Objects database), start a distinct installation program and respond to prompts as it runs.

Installing in Linux with MySQL

If you use the Linux operating system and the MySQL database for Business Objects:

- 1 Use a text editor to set values in the `ag-setup.env` file, which is located in the `$LAPPS_STAGE/ags_infrastructure` directory. The file contains the following prompts; set each to the indicated value.
 - `AG_BASE`, `AG_STAGE`, and `AG_HOME`: Supply the full paths to the directories you created as `$LAPPS_BASE`, `$LAPPS_STAGE`, and `$LAPPS_AG_HOME` (see page 8).
 - `ORACLE_CLIENT_HOME`: Supply the full path to the directory in which Oracle Client is installed.
 - `AG_SMTP_SERVER`: Supply the host name of the SMTP server your company uses for sending email.
 - `AG_DB_DRIVER`: Set the driver that ACTIVE Governance will use to connect to its database. Because only Oracle 9i is supported, use the following string:
`oracle.jdbc.driver.OracleDriver`
 - `AG_DB_CONNECT_STR`: Set the JDBC connect string ACTIVE Governance will use to connect to its database. Because only Oracle 9i is supported, use the following string, but provide actual values for *Hostname*, *Port*, and *SID*.
`jdbc:oracle:thin:@HostName:Port:SID`
 - `AG_DB_USER`: Supply the user name for the ACTIVE Governance database. It must match the name you created in step 1 on page 7. The recommended name is `XXLAAPPS_AG`.
 - `AG_DB_PASS`: Supply the password for the ACTIVE Governance database user identified by the `AG_DB_USER` entry.
 - `ARS_DB_CONNECT_STR`: Set the JDBC connect string that ACTIVE Governance will use to connect to the APPS database for an instance of Oracle Applications in which AppsRules runs. Use the following string, with actual values for the APPS instance replacing the *Hostname*, *Port*, and *SID* placeholders.
`jdbc:oracle:thin:@HostName:Port:SID`
 - `ARS_DB_USER`: Supply the user name for the APPS database cited in the `ARS_DB_CONNECT_STR` entry.
 - `ARS_DB_PASS`: Supply the password for the APPS database user identified by the `ARS_DB_USER` entry.
 - `MYSQL_SERVICE`: Specify a service name for the MySQL database to be used by Business Objects. The properties file contains a default value for this entry, and it's recommended that you retain the default.
 - `MYSQL_ROOT_PASSWORD`: Choose any password as the root password.
 - `MYSQL_UID`: Choose a user/schema for the MySQL database. The properties file contains a default value for this entry, and it's recommended that you retain the default.
 - `MYSQL_PASSWORD`: Supply the password for the database user identified by the `MYSQL_UID` entry.

- Network ports: Set ports to the following values. However, if any of these values is already used by another application, choose another value for its port:

```
CMS_PORT=6400
MYSQL_PORT=3306
TOMCAT_PORT=8080
TOMCAT_REDIRECT_PORT=8443
TOMCAT_SHUTDOWN_PORT=8005
```

- 2 Run the installation script. Execute the following commands:

```
cd $lapps_stage/ags_infrastructure
./ag-install.sh
```

Installing in Any Other Configuration

If you use a UNIX operating system, *or* if the Business Objects database is Oracle, install the ACTIVE Governance infrastructure: Edit and run an `ag.env` file to source the environment. Then run an installation program and respond to prompts as it runs. (In steps 1 and 3, substitute actual paths for the environment variables).

- 1 Navigate to the infrastructure directory:

```
cd $LAPPS_STAGE/ags_infrastructure
```

- 2 Using a text editor, open the file `ag.env`. In it, locate the `LAPPS_BASE`, `LAPPS_STAGE`, and `LAPPS_AG_HOME` entries and set them to the full paths to the base, staging, and home directories you've created (see step 8 on page 8). Locate the `ORACLE_HOME` entry and set it equal to the full path to the directory in which Oracle Client is installed (see page 8). Then save the file.

In each case, the path ends in a semicolon, which is followed by a phrase consisting of the word *export*, the environment-variable name, and another semicolon. Be sure to retain these elements. For example, if the base directory is `/opt/lapps`, the base-directory entry in the `ag.env` file would read:

```
LAPPS_BASE=/opt/lapps; export LAPPS_BASE;
```

- 3 Copy `ags.env` and `ag-services.sh` to your home directory:

```
cp ag.env $LAPPS_AG_HOME
cp ag-services.sh $LAPPS_AG_HOME
```

- 4 Execute the following command:

```
. ag.env
```

- 5 Navigate to an installation directory and run the installation program. If you use Solaris 10, execute these commands:

```
cd ./bobje/DISK_1
./ install.sh
```

If you use another operating system, execute these commands:

```
cd ./bobje/DISK_1
./ winstall
```

- 6 A language-selection screen appears. Choose the language in which you want to work. (English is the default.) Press Enter.
- 7 An Install Type screen appears. Press Enter to accept the default, New Installation.

- 8** A license-agreement screen appears. Press *Y* to accept its terms.
- 9** Enter the license code provided to you by LogicalApps, and press *Enter*.
- 10** When prompted for installation directory, enter the full path to `LAPPS_AG_HOME`.
- 11** Press *Enter* to accept the default installation type, *User*.
- 12** Press *Enter* to accept the default installation type, *New*.
- 13** A database-selection screen appears. To use MySQL as the Business Objects database:
 - Choose 1 in the database-selection screen and press *Enter*.
 - In the next screen, accept the default port assignment (3306) if that port is not already used by another application; if it is, choose an alternate MySQL port. Enter a password for the MySQL database user. Press *Enter*.
 To use Oracle as the Business Objects database:
 - Choose 2 (other than MySQL) in the database-selection screen. A list of databases appears, with Oracle at its head; select Oracle.
 - In the next screen, provide the host name, port number, SID, database user name, and password for the Oracle database to which you want to connect. (The user is the one you created in step 1 on page 7.) Press *Enter*.
- 14** In an application-server screen, press *Enter* to install Tomcat. (This is the default; Tomcat is the only supported application server.)
- 15** Review default port assignments for Tomcat. These should match the values shown on page 11; change only those (if any) already used by other applications.
- 16** Press *Enter* to complete the installation.
- 17** Execute the following commands only if you use Solaris 10:


```
cd $LAPPS_STAGE/ags_infrastructure
./ ag_install_bor2_post_sol10.sh
```
- 18** Go to `$LAPPS_AG_HOME/bobje/logging` and check log files — `boe-cmsd*.log` and `ccm*.log`. If these files contain errors, call LogicalApps Customer Support.

Configuring the Business Objects Server

Use the Business Objects Central Management Console (CMC) to configure the Business Objects components you've installed. To log on to the CMC:

- 1** Open a web browser and, in its address field, enter one of the following URLs, the first if you use Solaris 10 or the second if you use another operating system:


```
http://host:8080/businessobjects/enterprise115/admin/en/admin.cwr
http://host:8080/businessobjects/enterprise11/admin/en/admin.cwr
```

 Replace *host* with the name of the host on which you installed the ACTIVE Governance infrastructure. If, during installation, you chose an alternate for port 8080, change the value *8080* in the URL to the correct number for your alternate port.
- 2** A log-in form appears. To log in for the first time, type *Administrator* in the User Name field and leave the Password field blank. (A read-only System field is set to

the host name you specified in step 1. Accept the default value, *Enterprise*, for Authentication Type.) Click the Log On button.

- 3 In the Home panel, in a section labeled Organize, click on Servers.
- 4 In a Servers page, locate a server named *hostname.ras*, in which *hostname* is the name of the host system to which you've logged on. Single-click on the name.
- 5 A Report Application Server page opens for the server you've selected, with a Database tab active. Under the heading "Number of database records to read when previewing or refreshing a report," select the Unlimited radio button. Accept default values for the remaining fields. Click on the Update button.

BusinessObjects Enterprise
Central Management Console

Home > Servers > aspen.ras - Report Application Server

Database | Server | Metrics | Rights | Auditing

Number of database records to read when previewing or refreshing a report:

Unlimited

Records limited to:

Batch Size

Number of records per batch:

Browse Data Size

Number of records to browse:

Data Refresh

Oldest on-demand data given to a client (in minutes):

Report Job Database Connection

Disconnect when all records have been retrieved or the job is closed.

Disconnect when the job is closed.

Apply Update Reset

- 6 In the "breadcrumb trail" (*Home > Servers >* in the illustration above), click on the Home link. In the Home panel, locate the Manage section; in it, click on Business Objects Enterprise Applications. In a list of applications, click on InfoView.

BusinessObjects Enterprise
Central Management Console

Home > BusinessObjects Enterprise Applications > InfoView

Properties | Rights

Do not display logo

Display Business Objects logo

Display custom logo at this URL:

Use custom header colors

Background:

Text:

Style sheet:

Display:

Show "Preferences" button

Show "Type" dropdown list on the Listing page

Show "Filters" tab on the Schedule page

Default Navigation View: Folder

Category

Maximum number of pages of objects to show at a time:

Object Listing:

Object title link for schedulable objects

View the object

View the latest successful instance of the object

Viewers:

Allow users to use the Advanced DHTML Viewer. If unchecked, users who are currently using the Advanced DHTML viewer will use the DHTML Viewer instead.

Default viewer:

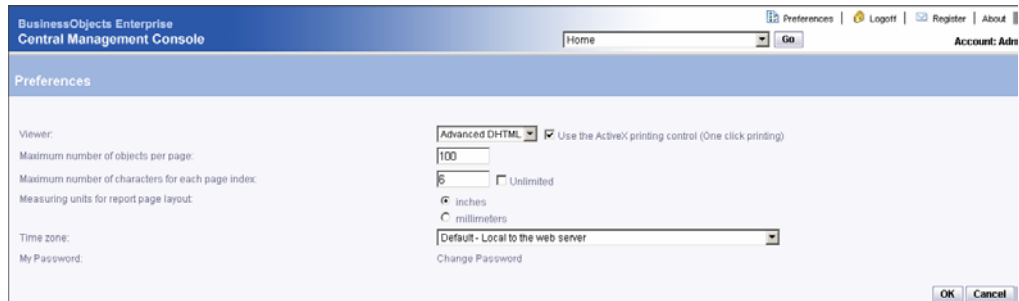
Update

7 Make these edits:

- In the Viewers section, select the check box labeled “Allow users to use the Advanced DHTML Viewer....” Then, in the Default Viewer list box, select Advanced DHTML.
- In the Display section, clear the check boxes labeled “Show ‘Preferences’ button” and “Show ‘Filters’ tab on the Schedule page.”

Accept default values for the remaining fields and click on the Update button.

8 Click on Home in the breadcrumb trail, and then on Preferences in a line of links along the upper right edge of the CMC.

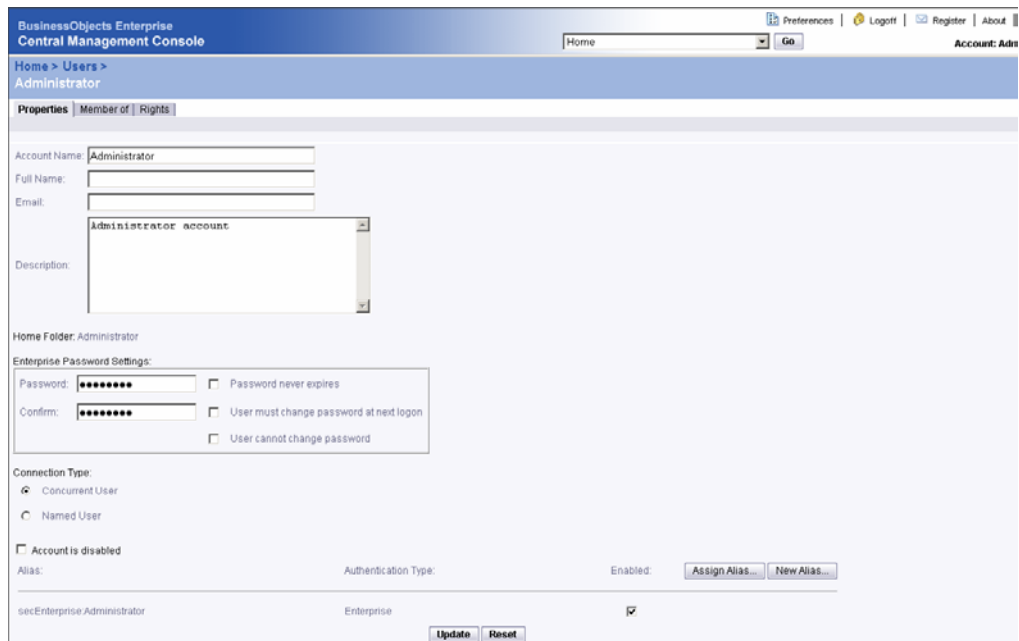


9 Make these edits:

- In the Viewer list box, select Advanced DHTML.
- Select the check box labeled “Use the ActiveX printing control.”

Accept default values for the remaining fields and click on the OK button. The CMC returns to its Home page.

10 In the Organize section, click on Users. An All Users page presents a list of users; click on Administrator.



- 11 In the Enterprise Password Settings area, create a personalized password for the Administrator user: Enter a password in both the Password and Confirm fields, and click on the Update button.
- 12 Click on the Logoff link along the upper right edge of the CMC. Then restart Business Objects services to apply the updates. Execute the following commands on the host server:

```
cd $LAPPS_AG_HOME
stop
start
```

Accommodating Firewalls

If your company has a firewall that blocks internal traffic, you must complete the following steps:

- 1 Open two new ports on the machine that hosts the ACTIVE Governance server. Typically these ports are dynamically assigned, but because the firewall blocks dynamically assigned ports, they must be assigned statically.
- 2 Shut down the services. Execute the following commands:

```
cd $LAPPS_AG_HOME
stop
```

- 3 Navigate to the bobje directory:

```
cd ./bobje
```

- 4 Using a text editor, open the file ccm.config. Perform the following edits:

- Locate the line that starts with the phrase *cmsLAUNCH=* and insert the following. In place of the italicized placeholder, insert one of the port numbers from step 1.
- Locate the line that starts with the phrase *inputLAUNCH=* and insert the following. In place of the italicized placeholder, insert the other port number from step 1. (This port number must differ from the cmsLAUNCH port.)

```
-requestport xxxx
```

```
-requestport yyyy
```

- 5 Save the file and exit from it.

- 6 Restart the services:

```
cd $LAPPS_AG_HOME
start
```

Installing the ACTIVE Governance Schema

In broad terms, to create ACTIVE Governance schema objects and seeded data, you first complete some additional Business Objects setup. If you did not use the Linux/MySQL script while installing infrastructure (page 9), you also copy and edit some

ACTIVE Governance files now. Next you extract and configure ACTIVE Governance schema-installation files, and then actually execute the schema installation.

Beginning the Process

To start the schema-installation process:

- 1 Log on to the ACTIVE Governance host server.
- 2 If you have not done so already, source the ACTIVE Governance environment: The installation procedure has copied the file `ag.env` from your staging directory to your home directory. Navigate to the home directory and ensure that `ag.env` is edited correctly (as described in step 2 of “Installing in Any Other Configuration” on page 11). Then enter the following command:

```
. ag.env
```

Setting Up Business Objects

To configure Business Objects setup properties:

- 1 Navigate to your staging directory:

```
cd $LAPPS_STAGE
```
- 2 Extract the contents of the Business Objects setup file. Execute the following command, replacing the italicized placeholders with actual version and build numbers, which you can determine by viewing a directory listing for the staging directory:

```
unzip bo_setup_7_1_n_bnn_ga.zip
```

- 3 Navigate to the `bo_setup` directory:

```
cd ./bo_setup
```
- 4 Using a text editor, open the file `BusinessObjectsConfiguration.properties`. The file contains the following prompts; set each to the indicated value.
 - `businessObjects.server`: Supply the ACTIVE Governance server host name.
 - `businessObjects.serverPort`: Use 6400 if you accepted default port values during installation. Otherwise, supply the value you set for `CMS_PORT` (page 11).
 - `businessObjects.username`: Always use the value *Administrator*.
 - `businessObjects.password`: Supply the password you set for the Business Objects Administrator user in step 11 on page 15.
 - `businessObjects.commit`: For the time being, set this value to *false*.

Save and close the file.

- 5 Set execution permissions on a `removeAuthenticationRestrictions.sh` file, and run the file:

```
chmod +x removeAuthenticationRestrictions.sh
./removeAuthenticationRestrictions.sh
```

- 6 If there are no exceptions, reopen the `BusinessObjectsConfiguration.properties` file and reset the `businessObjects.commit` property to `true`. Save and close that file, and then rerun `removeAuthenticationRestrictions.sh`.

Copying and Editing ACTIVE Governance Files

Complete this procedure only if you are installing ACTIVE Governance in a UNIX operating system *or* using an Oracle database for Business Objects, and if therefore you used the procedure described in “Installing in Any Other Configuration” (page 11) to install infrastructure. If you are installing in a Linux operating system and use MySQL for your Business Objects database, and so used the procedure described in “Installing in Linux with MySQL” (page 10), skip ahead to “Preparing Schema Installation Files” (page 19).

- 1 Shut down the Tomcat application server:

```
$LAPPS_AG_HOME/bobje/tomcatshutdown.sh
```

- 2 Copy ACTIVE Governance files from subdirectories of the staging directory to subdirectories of the home directory. Execute the following commands. (In the second command, a `.war` file name contains italicized placeholders that stand for version, schema, and build numbers. Replace these with the actual numbers, which you can determine by viewing a directory listing for the staging directory.)

```
rm -rf $LAPPS_AG_HOME/bobje/tomcat/webapps/ags
cp $LAPPS_STAGE/ags_infrastructure/ags_7_1_n_snn_bnn_ga.war
$LAPPS_AG_HOME/bobje/tomcat/webapps/ags.war
cp $LAPPS_STAGE/ags_infrastructure/post-install/ags.xml
$LAPPS_AG_HOME/bobje/tomcat/conf/Catalina/localhost
cp $LAPPS_STAGE/ags_infrastructure/post-install/*.jar
$LAPPS_AG_HOME/bobje/tomcat/common/lib/
cp $LAPPS_STAGE/ags_infrastructure/post-install/log4j.properties
$LAPPS_AG_HOME/bobje/tomcat/common/classes/
cp $LAPPS_STAGE/ags_infrastructure/post-install/*.gz
$LAPPS_AG_HOME/bobje/tomcat/webapps
cp $LAPPS_STAGE/ags_infrastructure/post-install/tomcats*.sh
$LAPPS_AG_HOME/bobje
cd $LAPPS_AG_HOME/bobje/tomcat/webapps
untar xvcfz desktop.tar.gz
untar xvcfz adhoc.tar.gz
```

- 3 Navigate to a directory containing xml files that you need to edit:

```
cd $LAPPS_AG_HOME/bobje/tomcat/webapps/desktop/WEB-INF
```

- 4 Using an xml editor, open `adhoc-config.xml`. In it, locate a string that reads `AG_HOST_NAME:TOMCAT_PORT` and perform the following edits.
 - Replace the phrase `AG_HOST_NAME` with the host name of the ACTIVE Governance server.
 - Replace the phrase `TOMCAT_PORT` with the port number for the ACTIVE Governance server. If you accepted default port values during installation, the port value here is 8080; if not, supply the value you set for `TOMCAT_PORT` (see page 11).

- 5** Using an xml editor, open `web.xml`. In it, locate a string that reads `AG_HOST_NAME:AG_CMS_PORT` and perform the following edits.
- Replace the phrase `AG_HOST_NAME` with the host name of the ACTIVE Governance server.
 - Replace the phrase `AG_CMS_PORT` with the CMS port number. If you accepted default port values during installation, the port value here is 6400; if not, supply the value you set for `CMS_PORT` (see page 11).

- 6** Navigate to the directory containing the `log4j.properties` file:

```
cd $LAPPS_AG_HOME/bobje/tomcat/common/classes
```

- 7** Using a text editor, open `log4j.properties`. In it, locate a property called `log4j.appender.file.File`. Set it equal to the following path and file name:

```
$LAPPS_AG_HOME/bobje/tomcat/logs/ags.log
```

This creates a log, maintained by Tomcat, that records errors in ACTIVE Governance processing.

Optionally, also set a `log4j.logger.com.logicalapps.onecenter` property to a value that determines the level of detail in log entries. From least to greatest, options are INFO (the default), WARN, ERROR, and DEBUG.

- 8** Navigate to the directory containing the `ags.xml` file:

```
cd $LAPPS_AG_HOME/bobje/tomcat/conf/Catalina/localhost
```

- 9** Using an xml editor, open `ags.xml` and perform the following edits. Each entry goes between `<value>` and `</value>` tags corresponding to each parameter.

- Locate the section headed `<ResourceParams name="Mail Session">`. In it, locate the `mail.smtp.host` parameter and, for its value, insert the host name of the SMTP server your company uses for sending email.
- Locate the section headed `<ResourceParams name="jdbc/onecenterDS">`. In it, locate the following parameters and supply these values for them:

`driverClassName` parameter. Insert the following string:
`oracle.jdbc.driver.OracleDriver`

`url` parameter. Insert the following string, with actual values for the ACTIVE Governance database in place of the *Hostname*, *Port*, and *SID* placeholders:
`jdbc:oracle:thin:@Hostname:Port:SID`

`username` parameter. Supply the user name for the ACTIVE Governance database. It must match the name you created in step 1 on page 7.

`password` parameter. Supply the password for the ACTIVE Governance database user identified by the `username` parameter.

- Locate the section headed `<ResourceParams name="jdbc/appsaccessDS">`. In it, locate the following parameters and supply these values for them:

`driverClassName` parameter. Insert the following string:
`oracle.jdbc.driver.OracleDriver`

url parameter. Insert the following string. In place of the *Hostname*, *Port*, and *SID* placeholders, insert actual values for the database used by an Oracle Applications instance in which AppsRules has been installed to run:

```
jdbc:oracle:thin:@Hostname:Port:SID
```

username parameter. Supply the user name for the database used by the Oracle Applications instance in which AppsRules has been installed to run. (Conventionally, this is APPS.)

password parameter. Supply the password for the database used by the Oracle Applications instance in which AppsRules has been installed to run.

Save and close the file.

Preparing Schema Installation Files

To configure ACTIVE Governance schema installation properties:

- 1 Extract the contents of the schema installation file. Execute the following commands, replacing the italicized placeholders with actual version and build numbers, which you can determine by viewing a directory listing for the staging directory:

```
cd $LAPPS_STAGE
unzip ags_schema_install_7_1_n_bnn.zip
```

- 2 Navigate to the ACTIVE Governance installation directory and set permissions within it:

```
cd $LAPPS_STAGE/ags_install
chmod +x permissions.sh
./ permissions.sh
```

- 3 Navigate to the ACTIVE Governance installation configuration directory and, in it, create a copy of a generic properties file so that the copy can be customized. (In the second command, replace the value *host* with the host name for your ACTIVE Governance server.)

```
cd config
cp filters-bundle-oracle.properties filters-host.properties
```

- 4 Using a text editor, open the *filters-host.properties* file and edit the following:
 - `hibernate.connection.url`: Supply the connect string that ACTIVE Governance will use to connect to its database. Use the following, but provide actual values for the *Host*, *Port*, and *SID* placeholders.

```
jdbc:oracle:thin:@Host:Port:SID
```
 - `hibernate.connection.username`: Supply the user name for the ACTIVE Governance database. It must match the name you created in step 1 on page 7.
 - `hibernate.connection.password`: Supply the password for the ACTIVE Governance database.
 - `businessObjects.server`: Supply the ACTIVE Governance server host name.
 - `businessObjects.serverPort`: Use 6400 if you accepted default port values during installation. Otherwise, supply the value you set for `CMS_PORT` (see page 11).

- `businessObjects.username`: Always use the value *Administrator*.
- `businessObjects.password`: Supply the password you set for the Business Objects Administrator user in step 11 on page 15.
- `log4j.filepath`: Supply the value *ags.log*, with no path. This is a log file that records errors in processing during installation of the ACTIVE Governance schema.
- `appserver.hostname`: Enter the host name and port number for the ACTIVE Governance server, separated by a colon. If you accepted default port values during installation, the port value here is 8080; if not, supply the value you set for `TOMCAT_PORT` (see page 11).
- `callbackhost`: Enter the following value. In place of the *host* and *port* placeholders, substitute the same host name and port values as you used for the `appserver.hostname` value:

```
http://host:port/ags
```

Save and close the file.

- 5** Navigate back to the ACTIVE Governance Installation directory:

```
cd $LAPPS_STAGE/ags_install
```

- 6** Using a text editor, open the `build.properties` file. In its first line — `config=bundle` — replace *bundle* with the same host name you used when you edited the `filters-host.properties` file (step 4). Save and close the file.

Completing the Schema Installation

To complete the ACTIVE Governance schema-installation process:

- 1** If you have not yet shut down the Tomcat application server, do so:

```
$LAPPS_AG_HOME/bobje/tomcatshutdown.sh
```

Even if you have, you should confirm that Tomcat is not running. Execute the following command; Tomcat is not running if it produces no results:

```
run ps -ef | grep tomcat
```

- 2** Execute the ACTIVE Governance installation script. Execute the following command, and answer *yes* to a prompt to continue executing the script.

```
everything.sh
```

- 3** When the script finishes running, restart the Tomcat application server. Execute the following command:

```
$LAPPS_AG_HOME/bobje/tomcatstartup.sh
```

- 4** Execute the following command to look for errors in the `ags.log` file. If you find any, call LogicalApps Customer Support.:

```
grep -i ERR ags.log
```

Note that the log-file path and name are correct only if you configured the `log4j.filepath` value as instructed in step 4 of the schema-file-preparation procedure.

Deploying Reports

ACTIVE Governance reports, and “business views” that support them, are available in an `ag_reportcenter` file. To deploy them, use Business Objects tools run from a Windows client system.

Setting Up

To install Business Objects components on your Windows client system:

- 1 From a site provided to you by LogicalApps Customer Support, download three zip files containing Business Objects client components to your Windows system. Extract the contents of the files.
- 2 From the directory in which you have downloaded the files, run the `setup.exe` file.
- 3 When prompted, enter the license code provided to you by LogicalApps.
- 4 When prompted, choose the Client installation.
- 5 Accept default values for all remaining issues.

Next, create a staging directory on the Windows client. From a site provided to you by LogicalApps Customer Support, download the file `ag_reportcenter_7_1_n_bnm_ga.zip` to the staging directory. (In this file name, italicized placeholders represent actual version and build numbers.) Extract the contents of the files. This creates a directory called Report Center. Beneath it, a Business Views subdirectory contains business views, and the remaining subdirectories contain reports.

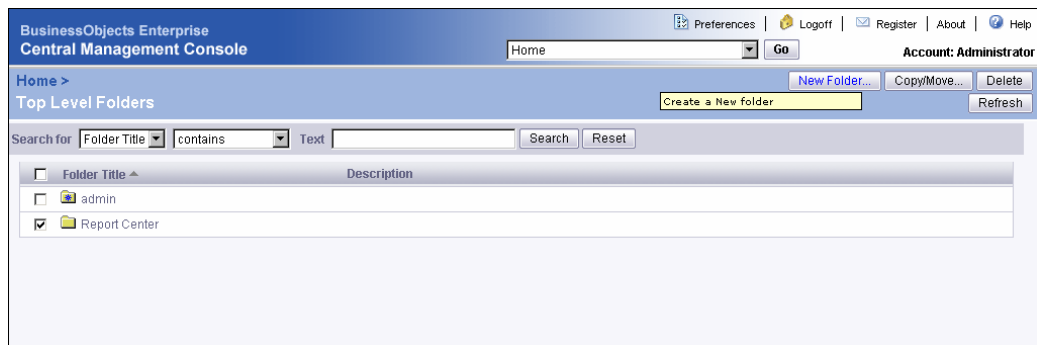
Finally, ensure that Oracle Client is installed on the Windows machine, and that aliases in the tnsnames.ora file for this instance of Oracle Client match those configured for the Oracle Client instance on the ACTIVE Governance server.

Archiving and Removing Old Versions

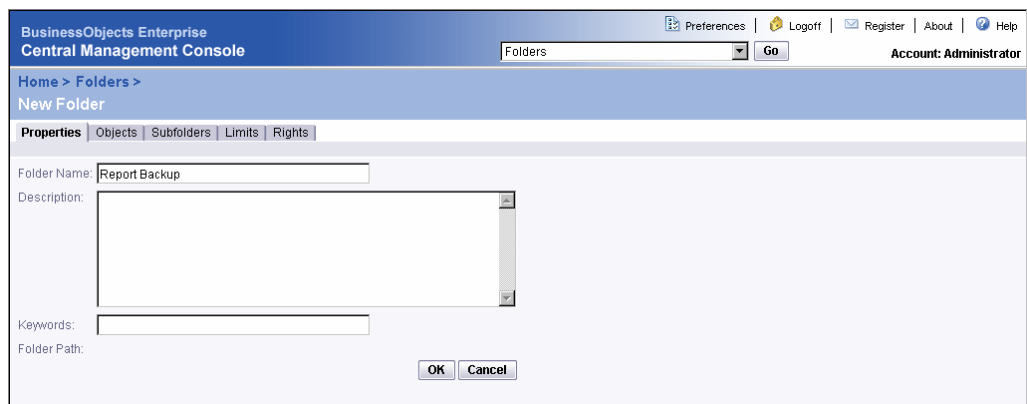
If you're installing version 7.1 of ACTIVE Governance to upgrade version 7.0, then you need to remove the version 7.0 reports and business views before setting up those for version 7.1. Because an update overwrites the run history of existing reports and report schedules, you may also want to back those up. (These issues don't apply, however, if you're performing a fresh installation. In that case, skip ahead to "Importing Business Views" on page 24.)

To back up existing reports:

- 1 Log on to the Central Management Console (see page 12).
- 2 In the CMC, click on the Folders link.
- 3 Create backup subfolders:
 - a Click on the New Folder button:

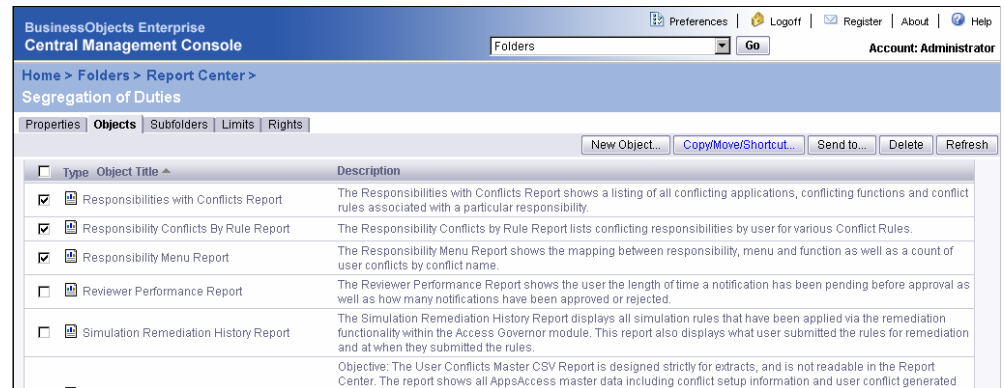


- b Type the name for the folder in the Folder Name field. Click on the OK button.

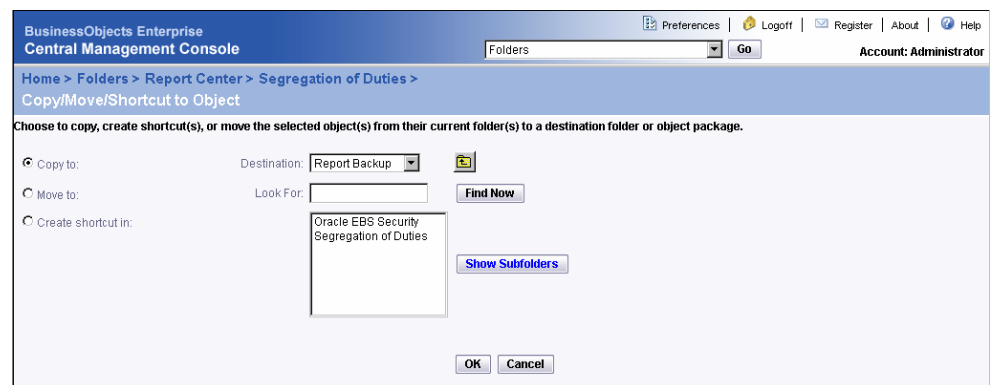


- c An entry for the newly created backup folder appears in the Top Level Folders panel. If you want to create subfolders under it, click on entry for the newly created backup folder in the Top Level Folders panel. Then repeat steps 3a and 3b.

- Click on the Folders link in the “breadcrumb” trail, and click on the entry for the Report Center folder. A list of subfolders appears; click on a subfolder that contains reports you want to back up. Then Click in the check boxes for the reports you want to back up:



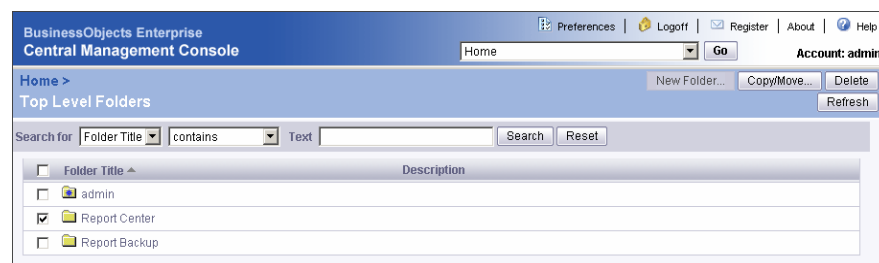
- Click on the Copy/Move/Shortcut button. The following window appears:



- In the field that lists folder names, click on the backup folder you created. If you have created subfolders for that folder, click on the Show Subfolders button and select the subfolder you want.
- Select the Move to radio button.
- Click on the OK button.
- Repeat this process for any other reports you need to back up.

To delete the outmoded reports and business views:

- Still in the CMC, return to the Top Level Folders panel. (From the Home panel, click on the Folders link. Or, from the panel shown in step 5, above, click on Folders in the breadcrumb trail.)

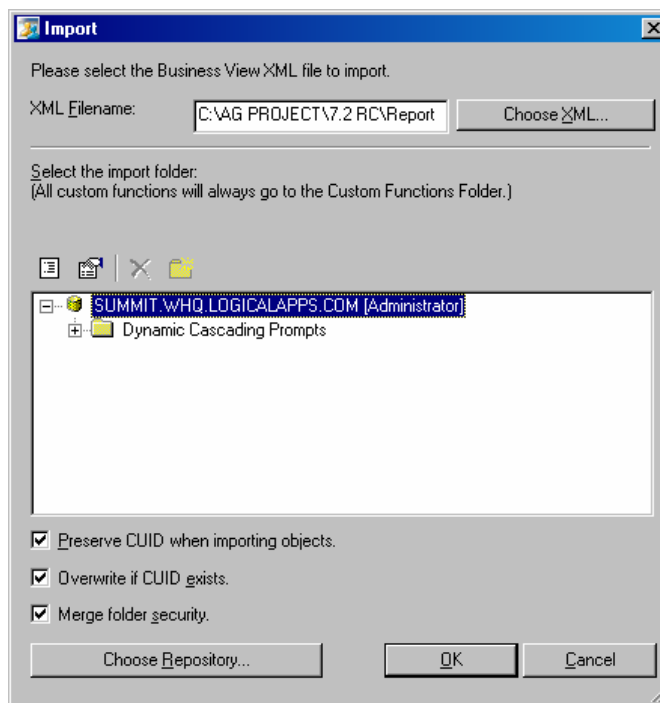


- 2 Select the check box for the Report Center folder.
- 3 Click on the Delete button. A pop-up dialog prompts you to confirm the deletion; click on its OK button.
- 4 Log off of the CMC and open Business View Manager, which is accessible from the Business Objects folder under Windows Start. As you log on, supply the host name of the ACTIVE Governance server in the System field; in the User Name field, the value *Administrator*; in the password field, the Administrator password created in step 11 on page 15; and in the Authentication field, the value *Enterprise*. Click on the OK button.
- 5 In the Repository Explorer (at the right of the Business View manager), right-click on the Report Center folder. A pop-up menu appears; click on its Delete option. A pop-up dialog prompts you to confirm the deletion; click on its Yes button.

Importing Business Views

The first step in deploying version 7.1 reports is to import “business views” — a set of .xml files. To do so, use Business View Manager:

- 1 If you needed to remove obsolete versions of the reports, you’ve already opened Business View Manager in the preceding procedure; simply continue to use it. If not, open Business View Manager; see step 4 above.
- 2 Click on Tools in the Business View Manager menu bar, and then on Import in the Tools menu. The following Import dialog appears.

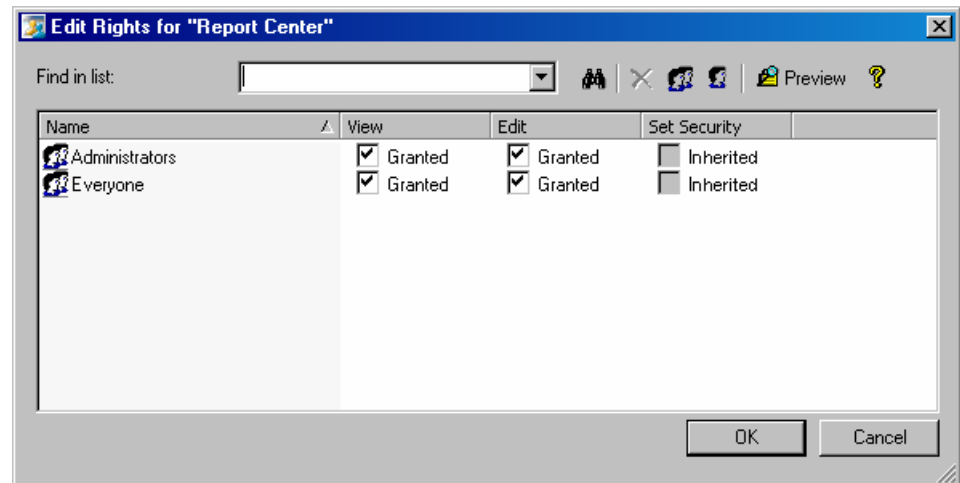


- 3 In the large white field, ensure that the line displaying the server host and domain name is selected.

- 4 Click on the Choose XML button. A navigation dialog opens; in it, navigate to the Report Center/Business Views subdirectory in your staging directory. Select any of the business views and click on the Open button in the navigation dialog. The path to the business-view xml file you selected should appear in the XML Filename field of the Import dialog.
- 5 Ensure that the three checkboxes near the bottom of the form are selected. These are labeled “Preserve CUID when importing objects,” “Overwrite if CUID exists,” and “Merge folder security.”
- 6 Click on the OK button. Choose to overwrite if there is any existing content. Business View Manager creates a Report Center directory, imports the business-view xml file into it, and displays the result in the large white field of the Import dialog.
- 7 Repeat steps 4–6 for each of the .xml files remaining in the Report Center/Business Views subdirectory of your staging directory.

Having imported the business views, set edit permissions for them:

- 1 In the Repository Explorer (at the right of the Business View Manager), right-click on the Report Center Folder.
- 2 A pop-up menu appears. Click on its Edit Rights option; an Edit Rights dialog appears:



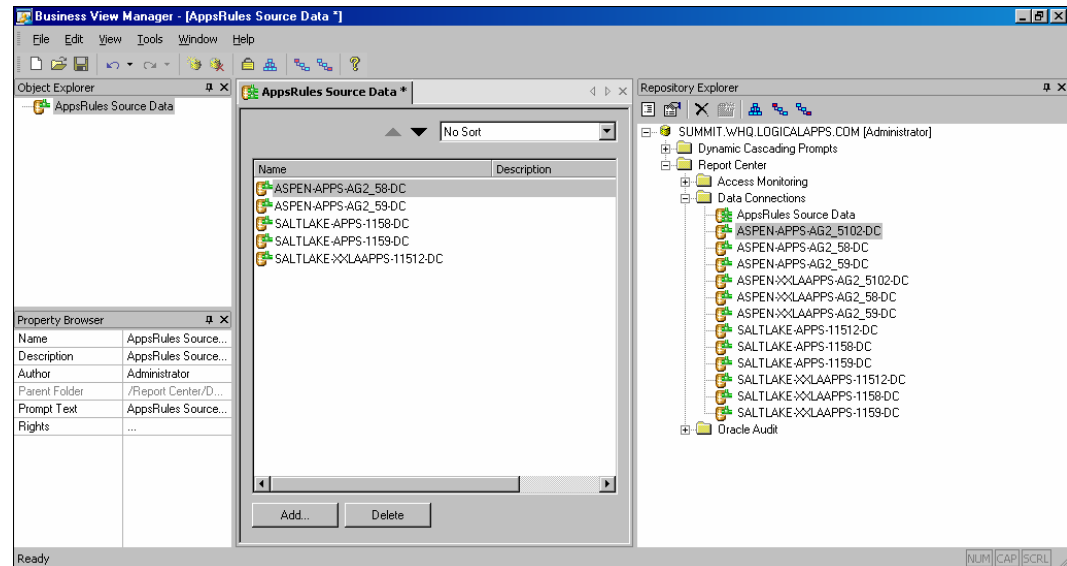
- 3 For both the Administrators and Everyone users, confirm that the check boxes in the View and Edit columns are selected, and so the check-box labels read “Granted,” and the check box in the Set Security column is grayed, so that its label reads “Inherited.” If not, click in the check boxes until they are set correctly. (A third option, “Denied,” is inappropriate for any of the check boxes.)

Establishing Data Connections

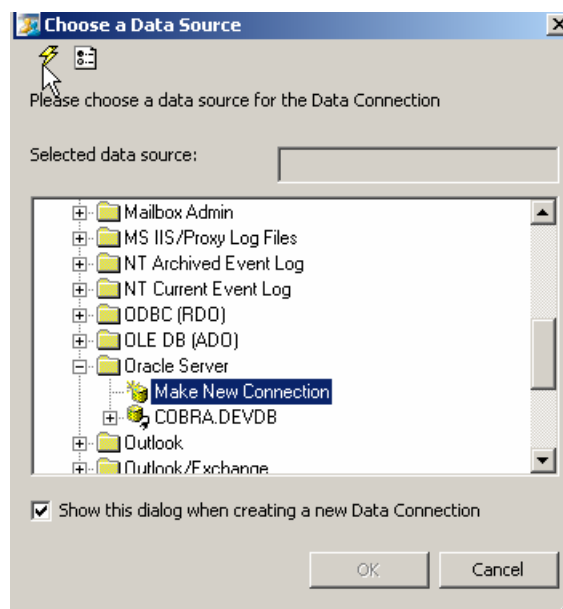
Next, you need set up data connections to ACTIVE Governance and AppsRules databases and include each in an ACTIVE Governance or AppsRules dynamic con-

nection. Moreover, the Business View Manager displays connections to data sources that do not apply to you; you need to delete them as well.

- 1 In the Repository Explorer click on the Data Connections folder under Report Center.



- 2 Beneath Data Connections, click on the AppsRules Source Data dynamic data connection. (The icon for each item in the list has one or two green pipe symbols; one symbol indicates a static connection and two indicate a dynamic connection.)
- 3 Items included in AppsRules Source Data appear in the central panel of the Business View Manager. Delete them there first (click on each and then on the Delete button), and then in the Repository Explorer.
- 4 Click on File in the menu bar, then on New in the File menu, and then on Data Connection in the New submenu. A Choose a Data Source dialog opens:

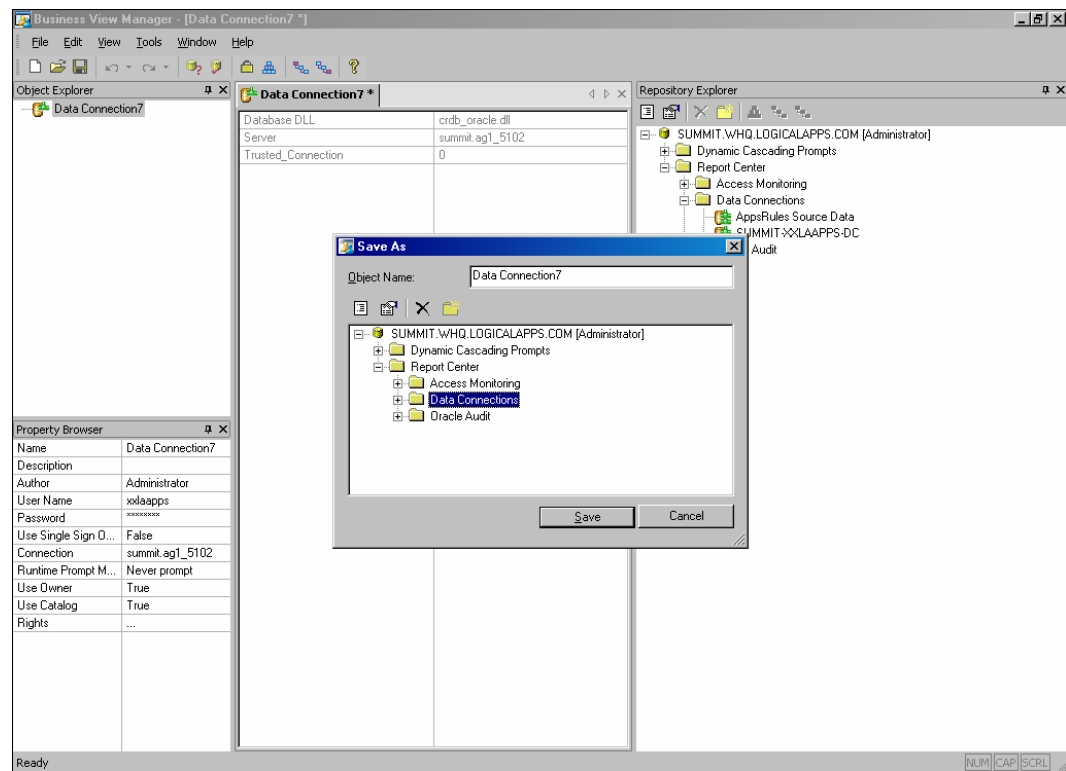


- 5 In its list, click on Oracle Server. If no data connections yet exist, a Connection dialog opens. If connections exist, they are listed beneath the Oracle Server entry, along with a Make New Connection option. Click on that option to open the Connection dialog.

- 6 Fill in the Connection fields with values for your ACTIVE Governance database. For Service, supply the alias for the database instance as it is configured in the tnsnames.ora file. For User ID, supply the database user (schema) name; for Password, supply the database password. Leave the OS Authentication check box cleared.
- 7 Click on the Finish button. A Set Data Connection Password dialog opens:

- 8 In the User Name field, type the same database user (schema) name as you did in step 6; in the Password and Confirm Password fields, type the same password. In the Runtime Prompt Mode list box, select the value *Never Prompt*. Ensure that the “Use Single Sign On when viewing” check box is cleared. Click on the OK button.

- 9 The Business View Manager once again becomes active, displaying values you've set for the data connection both in the central panel and in Property Browser area to the lower left.



- 10 Save the data connection: Click on File in the menu bar and then Save As in the file menu. A Save As dialog appears. Enter a name for the data connection in the Object Name field, and in the larger white field click on the Data Connections folder beneath the Report Center folder. Click on the Save button.

The Repository Explorer displays an entry not only for the data connection you've just configured, but also for an AG Source Data dynamic connection.

- 11 Repeat steps 4–10 for each AppsRules data source.
 12 Finally, associate the static data connections with the appropriate dynamic data connections.

Under Data Connections in the Repository Explorer, double click on the AG Source Data dynamic connection. A window for that connection opens in the central panel of the Business View Manager. Drag the ACTIVE Governance data connection you configured from the Repository Explorer to the central panel.

Then, under Data Connections in the Repository Explorer, double click on the AppsRules Source Data dynamic connection. A window for that connection opens in the central panel of the Business View Manager. Drag each of the AppsRules data connections you configured from the Repository Explorer to the central panel.

- 13 Click on File in the menu bar and then on Save in the File menu.

Publishing the New Reports

To publish the version 7.1 reports, use a Publishing Wizard, which is accessible from the Business Objects folder under Windows Start.

- 1** From the initial Publishing Wizard screen, click on the Next button.
- 2** Enter logon values: For System, supply the host name of the ACTIVE Governance server in the System field; in the User Name field, the value *Administrator*; in the password field, the Administrator password created in step 11 on page 15; and in the Authentication field, the value *Enterprise*. Click on the OK button.
- 3** A Select Files panel of the Publishing Wizard opens. In it, click on the Add Folder button.

This opens a Browse for Folder dialog; in its “Choose folder...” field, navigate to and click on the Report Center directory, which is a subdirectory of your staging directory. Select the Include Subfolders check box (click on it so that a check mark appears). Confirm that the list box near the bottom of the dialog displays the value *Report (*.rpt)*, which should be the default. Click on the OK button.

This closes the Browse for Folder dialog, and the Select Files panel once again becomes active, displaying a list of reports from the folders you’ve selected. Click on its Next button.

- 4** A Specify Location panel of the Publishing Wizard opens. In it, a large field displays the name of your ACTIVE Governance instance. (The Publishing Wizard uses the values you entered in step 2 to point to this instance.) Click on this value, and then on the New Folder icon (the leftmost of three above the large field; it looks like a folder). A New Folder entry appears, in editable mode, below the entry for your ACTIVE Governance instance; change its name to *Report Center*. Click on the Next button.
- 5** A Specify Folder Hierarchy panel of the Publishing Wizard opens. In it ensure that the radio button labeled *Duplicate the folder hierarchy* is selected. In the list box near the bottom of the panel, select the value *include none*. Click on the Next button.
- 6** A Confirm Location panel of the Publishing Wizard opens. It displays the file names below the folder in which they will be published. Confirm that the values are correct, and click on the Next button.
- 7** In the next several Publishing Wizard panels, you need do nothing. Click on the Next button in each until you reach the Specify Repository Refresh panel. That panel lists the reports you are publishing; in it, click on the Enable All button. Then click on the Next button.
- 8** In the next several Publishing Wizard panels, you need do nothing. Click on the Next button in each until you reach the Reading Files panel. When the Wizard finishes reading files, another panel lists the reports you are publishing. Click on the Next button. This commits the objects; finally, click on the Finish button.

Configuring Access to Reports

Within ACTIVE Governance, each user is assigned a “primary application role” and any number of “reporting roles.” Each of the reporting roles specifies a selection of reports the user is able to open and review. After publishing a new set of reports, you must correlate each report to its reporting roles by completing the following steps on the ACTIVE Governance server:

- 1 Navigate to a `bo_setup` subdirectory of the staging directory on your ACTIVE Governance server:

```
cd $LAPPS_STAGE/bo_setup
```

- 2 Using a text editor, open the `BusinessObjectsConfiguration.properties` file. In it, set the `businessObjects.commit` property to `false`. Save the file and close it.

- 3 Set execute permissions on a file called `run.sh`:

```
chmod +x run.sh
```

- 4 Execute the file:

```
run.sh
```

- 5 Executing the `run.sh` file generates a log file. Check it for errors:

```
grep -i error log.txt
```

- 6 If you find errors, call LogicalApps Technical Support.

If you find no errors, reopen the `BusinessObjectsConfiguration.properties` file and reset the `businessObjects.commit` property to `true`. Save the file and close it. Then re-execute the `run.sh` file.

Restarting Services

To activate the newly installed ACTIVE Governance and Business Objects components, you must stop and then restart the ACTIVE Governance and Business Objects services. A single procedure does both. The process requires that `ag.env` has been run to set environment variables; see page 16.

- 1 On the ACTIVE Governance server, navigate to the `$LAPPS_AG_HOME` directory.

- 2 Execute the following commands:

```
stop  
start
```

Configuring ACTIVE Governance

Once ACTIVE Governance is installed, several configuration steps remain. These steps include:

- Configuring licenses.
- Setting properties.
- Configuring data sources.
- Importing control monitors.
- Running background programs that set up ACTIVE Access Governor for use. (This also involves creating an ACTIVE Governance user with permissions to run the background programs.)
- Creating database users, and enabling database tables for auditing, to prepare the Access Monitoring feature of ACTIVE Access Governor for use.
- Assigning a user to a default workflow routing.

Configuring Licenses

LogicalApps provides you with licenses to run the components of ACTIVE Governance that your company has purchased to use. At minimum, you will receive an ACTIVE Governance Platform license; you may also have purchased licenses for ACTIVE Access Governor, ACTIVE Data Governor, and ACTIVE Policy Governor. In addition, you may have a license for a Crystal Reports Explorer Add-On in Business Objects.

First, download the licenses you are entitled to implement from a site provided to you by LogicalApps Customer Support.

To implement the Crystal Reports license:

- 1 Log in to the Central Management Console as the Administrator user. (See “Configuring the Business Objects Server” on page 12.)
- 2 In the Home page, click on License Keys.
- 3 In the Add Key field, type or paste the Crystal Reports Explorer Add-On license code.
- 4 Click on the Add button.
- 5 Log off the Central Management Console.

To implement the ACTIVE Governance licenses:

- 1 Log on to the ACTIVE Governance Platform. Use the following URL:
`http://Host:Port/ags`
Replace *Host* with the host name of your ACTIVE Governance server. Replace *Port* with the value *8080* if you accepted default port values during installation. Otherwise, supply the value you set for `TOMCAT_PORT` (page 11).
- 2 Log on as a System Administrator, for which the user name and password are both *admin*.
- 3 Click on the Administration Tab and, in the Administration Home page, the Manage Licenses link.
- 4 In the Organization Name field, type the name of your company. This value must match precisely the name in which the licenses were issued by LogicalApps.
- 5 For each of the licenses you are entitled to implement, enter the path and file name for the license file in the appropriate License Information field. You can either type the path and name for the license file, or select the Browse button and navigate to the file, at the site where you have downloaded it. The appropriate file names are:
 - ACTIVE Governance Platform: `platform.lic`
 - ACTIVE Access Governor: `accessGovernor.lic`
 - ACTIVE Data Governor: `dataGovernor.lic`
 - ACTIVE Policy Governor: `policyGovernor.lic`
- 6 Click on the Save button.

Setting Properties

From the Administration Home of the ACTIVE Governance Platform, you can also select a Manage Configuration Properties link to view or set properties for the appli-

cation. Generally, you can accept default values, but you may choose to confirm that values are set correctly, or reset some values.

The first several properties are set automatically during sever installation, many to values you chose while completing procedures documented in chapter 2. You need not change them. These include the following:

- `adminUser`
- `appserver.hostname`
- `businessObjects.reportSecurity`
- `businessObjects.server`
- `businessObjects.serverPort`
- `businessObjects.username`
- `callbackhost`

Two properties — `security.controlAdmins` and `security.controlViewers` — are no longer used. Leave them set to their default values.

The following properties can take the following values:

- `datasources.connection.pool.size`: This designates a number of users who can be connected to the database at once. (A user is not continually connected to the database while using ACTIVE Governance, but is instead connected when the application needs to read information from, or store data in, the database, and only for as long as the application needs to do so. So the number of users connected to the database at any given moment is much smaller than the number using ACTIVE Governance.) The default value is 10 and typically need not be changed.
- `exception.link.show`: This determines whether error messages contain a link that activates a display of detailed information about database errors. Valid values are *true* (the default) and *false*.
- `Licensee`: This must be set to the same value as the Organization Name field on the Manage Licenses panel. (See the preceding section, “Configuring Licenses.”)
- `pagination.show.all`: In ACTIVE Governance, lists of items are presented in grids, the footer row of which contains a Show Results list box that determines how many rows a grid displays at once. (The grid entries are divided into pages, each of which consists of the number of rows chosen for display.) In the Show Results list box, one can choose the value *All*. Because an attempt to display all records, no matter how many, in a single page can harm performance, the `pagination.show.all` parameter sets a limit on the number of records returned when a user selects the Show All Results option in a list. The default value is 1,000.

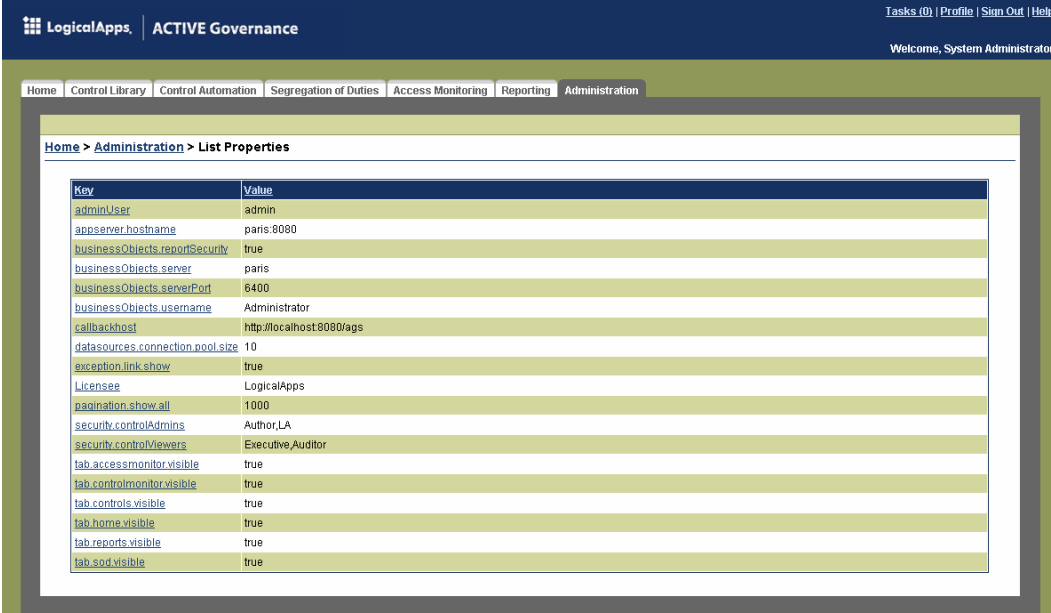
The ACTIVE Governance Platform contains tabs that activate panels in which one works with various features. The remaining properties determine which tabs are available for selection. Valid values are *true* (the default for each), which presents the tab

to all users, and *false*, which hides the tab from all users. Property names correspond to tab names as follows:

- `tab.accessmonitor.visible`: Access Monitoring
- `tab.controlmonitor.visible`: Control Automation
- `tab.controls.visible`: Control Library
- `tab.home.visible`: Home
- `tab.reports.visible`: Reporting
- `tab.sod.visible`: Segregation of Duties

To set properties:


- 1 In the ACTIVE Governance Platform, click on the Administration tab.
- 2 In the Administration home, click on the Manage Configuration Properties link. A List Properties panel opens:



The screenshot shows the ACTIVE Governance Administration interface. The breadcrumb navigation is "Home > Administration > List Properties". Below the navigation is a table of configuration properties:

Key	Value
adminUser	admin
appserver.hostname	paris:8080
businessObjects.renotSecurity	true
businessObjects.server	paris
businessObjects.serverPort	8400
businessObjects.username	Administrator
callbackhost	http://localhost:8080/ags
datasources.connection.pool.size	10
exception.link.show	true
Licensee	LogicalApps
pagination.show.all	1000
security.controlAdmins	Author,LA
security.controlViewers	Executive,Auditor
tab.accessmonitor.visible	true
tab.controlmonitor.visible	true
tab.controls.visible	true
tab.home.visible	true
tab.reports.visible	true
tab.sod.visible	true

- 3 Locate the property you want to set, and click on its name in the Key column. An Edit Property panel opens.



The screenshot shows the ACTIVE Governance Administration interface. The breadcrumb navigation is "Home > Administration > List Properties > Edit Property". Below the navigation is a form with the following fields and buttons:

Property Key:

Property Value:

- 4 Enter a new value in the Property Value field, and click on the Save button. The focus returns to the List Properties panel, with the new setting displayed.

Configuring Data Sources

During server installation, you supplied information required for ACTIVE Governance to connect to an APPS database for an instance of Oracle Applications in which AppsRules runs. You need now to use a Data Sources feature of the ACTIVE Governance Platform to supply the information again. You can also use this feature to set up additional Oracle Applications/AppsRules data sources. The information you enter in the Data Sources panels is used by the Segregation of Duties and Access Monitoring features.

- 1 In the ACTIVE Governance Platform, click on the Administration tab.
- 2 In the Administration home, click on the Manage Data Sources link.
- 3 A Data Sources panel opens. To create a new data source, click on the Add Data Source button; an Add Data Source panel (shown below) opens. To edit an existing data source, click on its name; a View Data Source panel opens, in which you would click on an Edit Data Source button. An Edit Data Source panel opens; it's identical to the Add Data Source panel, except that it displays current values for the selected data source.

- 4 Supply these values:
 - Label and Description. Provide entries that name and describe the data source. The label will appear in a list box from which users can select data sources when they use the Segregation of Duties and Access Monitoring features.
 - Type of Provider. Accept the default:
JDBC Provider (for relational databases)
 - JDBC Driver. Always supply the following value:
oracle.jdbc.driver.OracleDriver
 - Default Schema. Provide the schema name of the APPS database for the instance of Oracle Applications in which AppsRules runs. Because this would be an Oracle database, this value should be the same as the value you will supply in the Username field (see below), and is conventionally *APPS*.

- Database URL. Provide the JDBC connect string that ACTIVE Governance will use to connect to the APPS database for an instance of Oracle Applications in which AppsRules runs. This corresponds to the `ARS_DB_CONNECT_STR` value in the `ag-setup.env` file (see page 10), or to the `url` parameter in the `jdbc/appsaccessDS` section of the `ags.xml` file (see step 9 on page 18). This entry takes the following form, with actual values replacing the *Hostname*, *Port*, and *SID* placeholders:

```
jdbc:oracle:thin:@Hostname:Port:SID
```

- Username. Supply the user name for the APPS database cited in the Database URL field. Conventionally, this value is *APPS*. It corresponds to the `ARS_DB_USER` value in the `ag-setup.env` file (see page 10), or to the `username` parameter in the `jdbc/appsaccessDS` section of the `ags.xml` file (see step 9 on page 18).
- Password and Confirm Password. Supply the password configured for the database user identified by the Username entry. This value corresponds to the `ARS_DB_PASS` value in the `ag-setup.env` file (see page 10), or to the `password` parameter in the `jdbc/appsaccessDS` section of the `ags.xml` file (see step 9 on page 18).

- 5 Click on the Save button. The focus shifts to the View Data Source panel, which displays the values you’ve saved. In that panel, click on the Test Data Source button. A message either reports that the test is successful or reports errors; in the latter case, click on the Edit Data Source button to correct the errors.

Importing Control Monitors

In ACTIVE Governance, a control monitor employs one or more statements, written in structured query language (SQL), that define actions subject to control. It establishes a sequence in which the statements are evaluated and the records they return are designated as “suspect tasks.” Each monitor is configured in ACTIVE Policy Governor, and is then attached to a control definition written in the ACTIVE Governance Platform.

If your company is licensed to use ACTIVE Policy Governor, you may have purchased “prepackaged” control monitors — a set of monitors configured by LogicalApps. If so, you need to import them into ACTIVE Policy Governor.

First, download the file `ora_pack_7_1_n_nm.zip` from a site provided to you by LogicalApps Customer Support. (In this file name, italicized placeholders stand for actual version and build numbers.)

Next, use an import feature available in the ACTIVE Governance Platform both to extract control monitors from this file and to import them into ACTIVE Policy Governor. See the *ACTIVE Policy Governor User’s Guide* for the complete procedure: In the ACTIVE Governance Platform, click on the Help link (which is located near the upper right corner of every panel on the Platform). A Help home page opens; in it, click on the link for ACTIVE Policy Governor. The *Policy Governor User’s Guide* opens; in its contents panel, click on the link for Prepackaged Control Monitors.

Running Background Programs

If your company is licensed to use ACTIVE Access Governor, you'll need to prepare it for use by running one or more “background programs.”

- In Access Governor, SOD rules specify two or more responsibilities or functions that should not be assigned simultaneously to an individual person. Some rules permit conflicting responsibilities or functions to be assigned if they are approved, and so each rule designates an approver. For this purpose, an LAA Populate WF Roles Table program filters workflow roles, as they are defined in Oracle Applications, to select those appropriate to serve as SOD-rule approvers, and places the filtered selection of roles in a table that supplies values to an Approver field on an Add SOD Rules panel. You must run this program.
- If you intend to run Oracle EBS Security reports — which list responsibilities, menus, and functions available to individual users — you would first run a program called LAA Populate User Access Data Table. It updates a database table that contains information about users' assignments and provides that information to the reports.
- Moreover, your company may have purchased a “content spreadsheet,” in which you can select SOD rules prepared by LogicalApps, edit them to contain values appropriate for your site, and then upload them all at once. In that case, you would run a Load SOD Conflict Rules program.

You are currently logged on as a System Administrator, a “primary application role” that does not have rights to run background programs. The System Administrator can, however, create users at other roles, and so you must create an ACTIVE Governance user with permission to run the programs — one whose primary application role is AG Super User, SOD Super User, Author, Manager, or Rule Builder. You would then log on as that user to run the background programs.

Refer to ACTIVE Governance user's guides for appropriate procedures. In the ACTIVE Governance Platform, click on the Help link. The Help home page opens. In it, do the following:

- For information on creating users, open the *ACTIVE Governance Platform User's Guide*: In the Help home page, click on the ACTIVE Governance Platform link. The *Platform User's Guide* opens; in its contents panel, click on the link for User Administration.
- For information on running background programs, open the *ACTIVE Access Governor User's Guide*: In the Help home page, click on the ACTIVE Access Governor link. The *Access Governor User's Guide* opens; in its contents panel, click on the link for Background Programs.

Preparing Access Monitoring

Access Monitoring enables ACTIVE Governance users to request temporary access to database tables or to Oracle responsibilities. Requests are subject to approval, and once they are approved, the access is continually audited. Access Monitoring main-

tains a set of user IDs for responsibility-access requests; as each user's access expires, his ID can be reused. However, a distinct set of IDs applies to database-table access, and a database administrator must create these database user IDs.

Each of these user IDs must begin with the letters *LAAG*. Although they may otherwise follow any format, the recommended format is *LAAGDBx*, where *x* is a unique number.

After the IDs are created, an LAAG DB Users Synchronization Process concurrent request must be run in the LogicalApps responsibility of Oracle Applications; this enables Access Monitoring to recognize the IDs and display them so that they are available for selection. The request takes no parameters.

Moreover, for Access Monitoring to work, database tables must be audit-enabled, regardless of whether they are to be accessed directly or through a responsibility. To enable tables for auditing, one would use an Access Monitoring Content form, available through a LogicalApps “embedded agent” in Oracle Applications. A set of tables is typically audit-enabled during system installation, and afterwards users may use the Access Monitoring Content form to determine which tables (and columns) are already audit-enabled, and add to them.

For information on enabling database tables for auditing, open the *ACTIVE Access Governor User's Guide*. In the ACTIVE Governance Platform, click on the Help link. The Help home page opens. In it, click on the ACTIVE Access Governor link. The *Access Governor User's Guide* opens; in its contents panel, click on the link for Access Monitoring.

Preparing the Default Workflow Routing

In ACTIVE Governance, whenever controls or related “control-library” objects are created or modified, they must be approved before they can be used. Each access request generated through the Access Monitoring feature must be approved before it is granted. And suspects generated by control monitors must be reviewed. To define sequences in which review requests are sent to users, groups, or both, ACTIVE Governance implements workflows.

ACTIVE Governance comes with a Default Approval Workflow so broadly defined that it can route for review any control-library object, access request, or suspect that is not captured by any other workflow that users may configure. Initially it is at an Editing status, and it does not specify any user to perform reviews. As an installation step, you must designate a user who belongs to this workflow, and then activate it. You can use the admin user that came already created on ACTIVE Governance, or you can create another user for this purpose.

As already noted (on page 37), you can consult the *ACTIVE Governance Platform User's Guide* for information on creating users. The “Creating Workflows” chapter of that guide (and in particular the section of that chapter titled “Editing a Workflow Routing”) provides instructions for adding a user to a workflow and activating a workflow. Once again, the *User's Guide* is accessible from the Help link of the ACTIVE Governance Platform.