HP OpenView Usage Manager Using Radia

for the Windows operating system

Software Version: 2.1

Upgrade Procedures Guide

February 2005

hp invent

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Technical Support

Please go to the following web site:

http://www.managementsoftware.hp.com/

There you will find contact information and details about the products, services, and support that HP OpenView offers.

The support site includes:
- Downloadable documentation
- Troubleshooting information
- Patches and updates
- Problem reporting
- Training information
- Support program information

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1 Upgrading Your Radia Usage Manager

In order to upgrade your Radia Usage Manager to version 2.1, update the following components:

- Radia Knowledge Base Manager
- SQL Server or Oracle Database
- Radia Database
- Radia Server Pages
- Radia Usage Manager Administrator

The sections that follow describe in detail how to update each Radia Usage Manager component.

Step 1: Upgrade the Knowledge Base Manager Windows Service

- Stop the Knowledge Base Manager Windows Service to stop all activity performed by the Knowledge Base Manager.

- You must uninstall any existing Knowledge Base Manager binaries currently installed. Older versions of the Knowledge Base Manager were manually installed and registered. These must be manually removed. There is no need to remove the registry settings associated with the install, only the binaries.

- Install the Radia Knowledge Base Manager. Download the latest Radia Knowledge Base Manager from the HP support web site. This package will upgrade any previously installed Knowledge Base Manager files previously installed using a Windows Installer based install, including the Knowledge Base Manager's Control Panel applet; or it will install a new Knowledge Base Manager. The Windows Service is automatically started and set to *automatic*.

- Launch the Control Panel applet to ensure that the configuration options specified are acceptable.
- Stop the Knowledge Base Manager Service to stop all activity prior to upgrading the remaining components of the Usage Manager.

> The Radia Knowledge Base Manager is a component of the core Radia Infrastructure and is included with the Radia Infrastructure media. For version 2.1 of the Radia Usage Manager, the Radia Knowledge Base Manager version 4.0.1 is included on the Radia Usage Manager CD-ROM. For the latest version of any Radia component, always check the HP support web site.

Step 2:   Stop All Activity to your Usage Manager SQL Database

- Stop all Radia Integration Servers that may access Usage Manager data in the SQL database. Ensure that your Knowledge Base Manager Windows Service is also stopped.

Step 3: Upgrade Your Radia Usage Manager Database

Upgrade your SQL Server or Oracle Radia Usage Manager Database.

Upgrade Your SQL Server Database

Run the following database schema updates using the SQL Server Query Analyzer tool.

> Upgrade to Release 1.9.0 level only if you are running an LA release prior to 1.9.0.

Scripts are located in the CD image `\SQL Server\Upgrade to LA Release 9.0\Required\` directory. Scripts must be run in the order specified below.

- **Upgrade Views to LA-9.sql**
  (optional: only if your current install is prior to Release 1.9.0)

- **Upgrade Functions to LA-9.sql**
  (optional: only if your current install is prior to Release 1.9.0)

- **Upgrade Stored Procedures to LA-9.sql**
  (optional: only if your current install is prior to Release 1.9.0)

- **Upgrade Tables from LA-4 to LA-5.sql**
  (optional: only if your current install is Release 1.4)

- **Upgrade Tables from LA-5 or LA-6 or LA-7 to LA-8.sql**
  (optional: only if your current install is Release 1.5, 1.6, or 1.7)

- **Upgrade Tables from LA-8 to LA-9.sql**
  (optional: only if your current install is Release 1.8)

Required Scripts

Apply Service Packs – Scripts must be run in the order specified.

- First, run the script `SQL Server - Check for Duplicate Property Data.sql` from the `\SQL Server\ServicePacks\Required\` directory.

Follow the directions in this script. Depending on the results returned from this script (see the guidelines in the script), you may have to run the repair script `SQL Server – Repair Duplicate Property Data.sql` from the `\SQL Server\ServicePacks\Optional\` directory. This is a prerequisite for running Service Pack 5.

- Run Service Packs 1, 2, 3 and 5, in this order, from the `\SQL Server\ServicePacks\Required\` directory. Note that Service Pack 5 requires installation of supporting software. Follow the instructions in each Service Pack and remember to change the two occurrences of *your_RUM_DB* to your Usage Manager database name in Service Pack 5.

Some installations may have already applied Service Packs 1, 2, and 3. If so, then you should re-run these Service Pack scripts again, otherwise an error may occur when inserting data into the ServicePackHistory table since its format has been modified.

Optional Scripts

SQL Server - Define All Materialized Tables and `Indexes.sql`

View materialization adds de-normalized data tables and related indexes to your Radia Usage Manager database. These tables are created from the primary views associated with retrieving data from the normalized real-time tables. This process results in large, static data tables that contain de-normalized data. Creating materialized tables does not preclude reporting against real-time data in the Usage Manager database tables, but is an alternative reporting capability

De-normalized data table access allows for significantly faster reporting using materialized tables versus using the real-time table data. Note that running this script may require large amounts of additional disk storage space for your database (i.e., 10 GB or more for a 6000 device SQL Server database).

SQL Server - Check for Invalid File Signature `Properties.sql`

This script checks for invalid file signatures in the database. This condition only existed in releases prior to release 1.9.0. There is no harm in running the Check version of this script against any version of the database. No rows returned indicates a successful database check.

SQL Server – Repair Invalid File Signature `Properties.sql`

> ⚠️ This script should only be run if the Check script above returns 1 or more rows of data.

This script drops all rows from the rcaFileSignatureProperties table and no reporting can occur until the Radia 2.x client has been installed and usage data is recollected from each device. At this time, all file signatures will have no property associations in the database until new data is imported into the SQL database. This means any query that uses properties will show incorrect results until the clients have re-imported their inventory data. This is true for nearly all reports.

Upgrade Your Oracle Database

Oracle database support was first introduced with Release 1.9.2. As such, the upgrade requirements are simpler than for SQL Server as there are no upgrade considerations for release 1.9.0 and below. To upgrade your Oracle database server, whether for Oracle 8i or 9i, follow the steps in the order below.

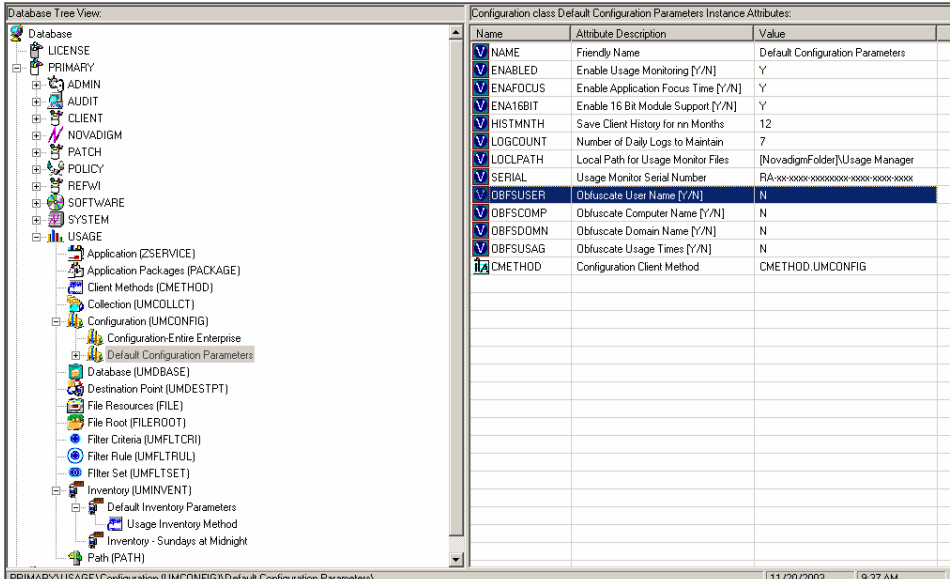### Apply Service Packs – Scripts must be run in the order specified.

- First, you must run the script `Oracle_Check_for_Duplicate_Property_Data.sql` from the `\Oracle\Oracle_xx\ServicePacks\Required\` directory. Follow the directions in this script. Depending on the results returned from this script (see the guidelines in the script), you may have to run the repair script `Oracle_Repair_Duplicate_Property_Data.sql` from the `\Oracle\Oracle_xx\ServicePacks\Required\Optional\` directory. This is a prerequisite for running Service Pack 5.

- Run Service Packs 1, 2, 3 and 5, in this order, from the `\SQL Server\ServicePacks\Required\` directory. Note that Service Pack 5 requires installation of supporting software. Some installations may have already applied Service Packs 1, 2, and 3. If so, then you should re-run these Service Pack scripts again, otherwise an error may occur when inserting data into the ServicePackHistory table since its format has been modified.

Step 4: Upgrade your Radia Database

UMCONFIG Class Upgrades – Release 1.8 and Below Only

Add these new attributes which obfuscate the following information collected on each client device. These attributes were added in Release 1.9.0 and must be applied by installations currently running Release 1.8 or below only.

- User Name – The user name is reported as [AnyUser].

- Computer Name – The computer name is reported as a random set of alphanumeric values.

- Domain Name – The computer name is reported as a random set of alphanumeric values.

- Usage Times – The executable file usage times and launch counts are all reported as zero values.

Figure 1   Default Configuration Parameters.

These attributes should be defined in the UMCONFIG class with the definitions displayed in Figure 2, below.

Figure 2   UMCONFIG class.

UMINVENT Class Upgrades – Release 1.8 and Below Only

The following new attribute provides three levels of scanning depth for executables being inventoried on each client device.

File Signature Scan Mode – Defines whether to capture and compare based on the following:

- **S** - File Sizes Only - faster, less comprehensive (default).

- **H** - Entire Module Header - slower, more comprehensive.

- **M** - Complete MD5 Signature - slowest, most comprehensive.

Figure 3   Default Inventory Parameters.

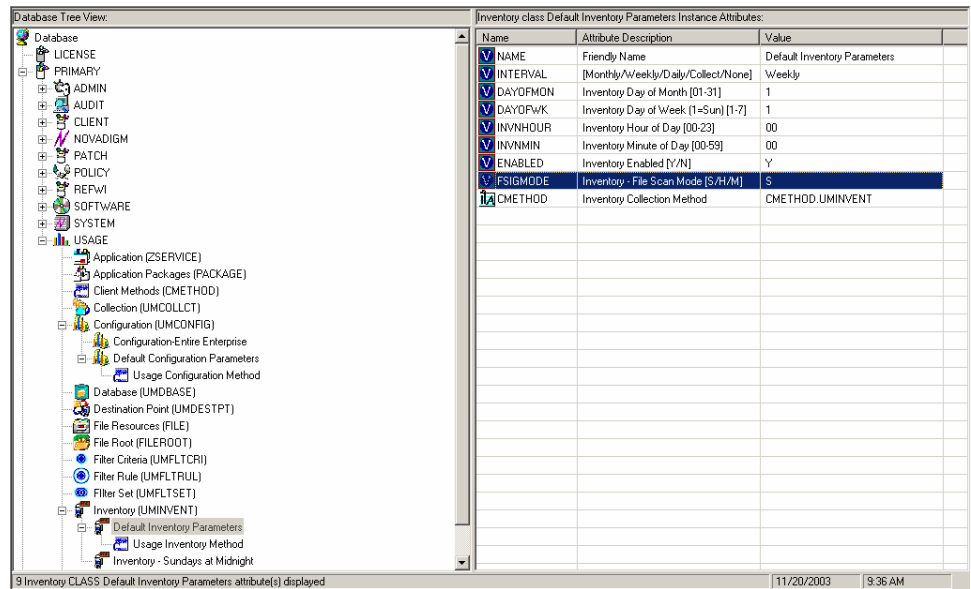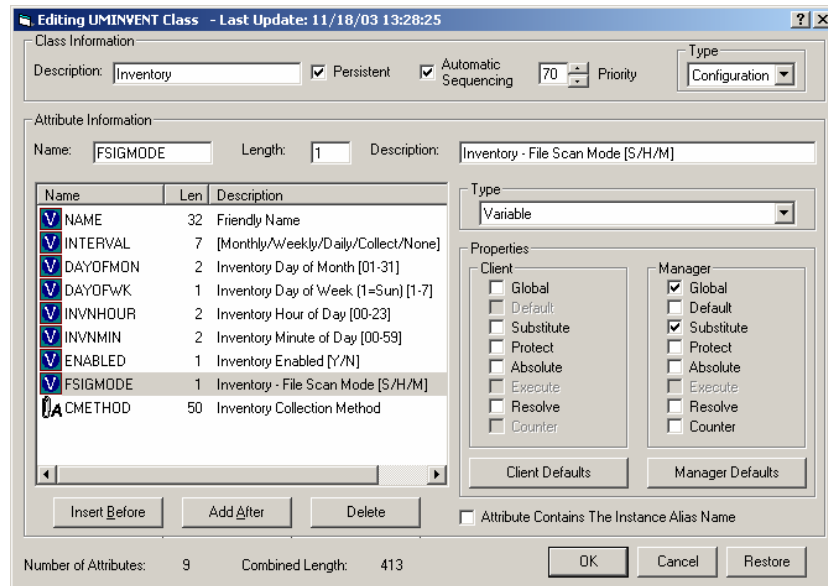This attribute should be defined in the UMINVENT class as displayed in Figure 4, below.

Figure 4   UMINVENT class.

Version 2.1 Radia Usage Manager Client Upgrades

The Radia Usage Manager client has been upgraded for Release 2.1, and now you must upgrade the client. Refer to the *Radia Usage Manager Guide* and the technical note *Radia Usage Manager –Best Practices*, for more information.

Install the new client by running the updated `UMSetup.exe` on the clients. This will occur during the next Radia connect. Note that all client devices do not have to be updated all at once or immediately.

If Radia is being used for configuration and deployment of the Radia Usage Manager client, the files for distribution are located on the Radia Usage Manager CD in the `Client Install\Scripts` (all `.tcl` files) and Client Install\Setup (`UMSetup.exe`) directories. Copy these files to `C:\temp` and publish them to the USAGE domain using Component Selection Mode. Complete the configuration per the technical note *Radia Usage Manager – Best Practices* and the Radia Usage Manager Client will be updated upon the next Radia connect.

If the script `SQL Server - Repair Invalid File Signature Properties.sql` was run, the rcaFileSignatureProperties table will be corrected for a file as soon as any client sends its file signature information. This happens automatically when a file is used or a new file is discovered. This means the database will correct itself for the most heavily used applications almost immediately. Data for unused files will resynchronize when the upgraded client is installed since it will force a full one-time inventory of all executables.

Step 5: Upgrade your Radia Server Pages for Reporting

Stop your Radia Integration Server and then copy the `\usage` directory from the CD directory `\Radia Server Pages - Web Reports\usage` to your Radia Integration Server's root directory. Note that Release 2.1 compatible reports require the database server to have upgraded Views, Functions, Tables, and Stored Procedures. These were updated earlier in this sequence by the Service Pack 5. If you are using Materialized View reporting, refer to

the Technote describing Materialized View support located in the
\documentation directory. You may now restart you Radia Integration
Server.

Step 6: Upgrade your Radia Usage Manager Administrator

Upgrade or install the Radia Usage Manager Administrator from the `\Radia Usage Manager Administrator\` directory on the CD image using the
Windows Installer package provided. This package will upgrade any already
installed Usage Manager Administrator files.

Step 7: Restart the Knowledge Base Manager

Start the Knowledge Base Manager Windows Service to restart import and
other activity configured for the Knowledge Base Manager. Ensure the
ODBC connectivity, import and other activity is occurring correctly by
viewing each task's log file.

If the Radia Usage Manager client was upgraded from a release prior to
1.9.0, then ensure that a full inventory is being received by the Knowledge
Base Manager for all connected devices.

Step 8: Validate the Radia Usage Manager Client Upgrades

Validate that the Radia Usage Manager Client has been upgraded on your
machines. This can be validated by viewing the Radia Application Event
information or by directly analyzing the Usage Manager log file in directory
`C:\Program Files\Novadigm\Setup\Log\` for the machine.

2 Upgrading an Existing USAGE Domain

If you have a USAGE domain already installed into your Radia Database, to more effectively update the Radia Usage Manager Client install, make the following changes to your existing USAGE domain.

1   Change the Application (ZSERVICE) BASE_INSTANCE instance as follows:

    a   Remove the connection to USAGE.PACKAGE.RADIA_USAGE_MANAGER_CLIENT from the ALWAYS connection.

    b   Right-click the ZSERVICE class entry and edit the ZSERVICE class template. Change the first ALWAYS connection description (Usage Manager Package) to Usage Collection Connection.

    c   Change the Local Repair value (LREPAIR) from blank to Y.

2   Under the Client Methods (CMETHOD) class, for the Usage Configuration Method instance, add the connection USAGE.PACKAGE.RADIA_USAGE_MANAGER_CLIENT to the first ALWAYS connection entry.

> In order to attach a PACKAGE class instance to a CMETHOD class instance, drag and drop capability must be manually enabled. Refer to the section *ADMIN Domain Changes for an Existing USAGE Domain,* in Appendix A at the end of this guide for more information.

3   Since the NVDKIT and HIDE executable are shipped and maintained by the Radia Application Manager Client, under the PACKAGE class:

    a   Rename the Radia nvdkit instance to Radia GZIP Application.

    b   Delete the HIDE executable and the NVDKIT executable instances from the package. Leave only the GZIP.EXE instance and its path.

A ADMIN Domain Changes

This chapter discusses the changes that must be made to the ADMIN domain for existing USAGE domains and pre-version 4.x databases that do not currently have a USAGE domain.

ADMIN Domain Changes for an Existing USAGE Domain

Allow PACKAGE class instances to attach to the CMETHOD class instance by modifying the ADMIN domain.

Changes need to be made to the following ADMIN domain classes:

- Name Lists (8) (ZLIST)
- Connection Rules (ZCONNECT)

ZLIST Class Changes for CMETHOD

Add a new instance to the ZLIST class.

To update the ZLIST class

2   Use the Radia System Explorer to navigate to and expand the ADMIN domain.

4   Right-click **Name List (8) (ZLIST)** and select **New Instance**. Add a new instance named CONNECT_CMETHOD_TO_RULES.

5   In the tree view, double-click the new instance and add the following ZNAME values.

Instance: CONNECT_CMETHOD_TO_RULES

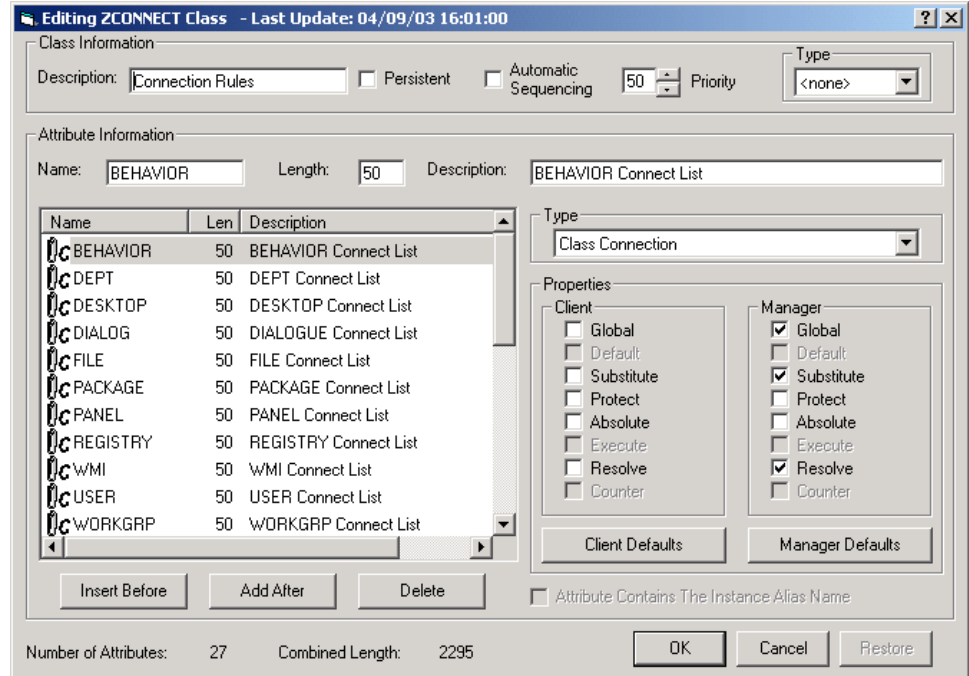ZNAME: ZNAME01

ZNAME value: PACKAGE

ZCONNECT Class Changes for UMCONFIG

Edit the ZCONNECT class to include the new USAGE domain classes.

To update the ZCONNECT class

1   Use the Radia System Explorer to navigate to the PRIMARY file, ADMIN domain.

2   Double-click the ADMIN domain.

3   Right-click **Connection Rules (ZCONNECT)**, and select **Edit Class**.

4   Use the scroll bar to scroll to the bottom of the list of attributes.

5   Highlight the last attribute in the list by left-clicking the name of the attribute.

6   Click **Add After** to add a new attribute.

7   Add a new attribute to the list with the following information:

Name: CMETHOD

Length: 50

Description: CMETHOD Connect List

Type: Class Connection

8   Click **OK** to close the Editing Class dialog box and save your changes.

9   In the tree view of the Radia System Explorer double-click **Connection Rules.**

10 Double-click **MASTER_**.

11 Right-click **MASTER_CONNECTION_RULES** and select **Edit Instance** to add the values for the new instance. See *Table A.3 ~ CMETHOD Instance Values,* below, for the new instance value.

Name: CMETHOD

Attribute Description: CMETHOD Connect List

Value: ZLIST.CONNECT_CMETHOD_TO_RULES

12 Double-click **CONNECT_CMETHOD_TO_RULES** and add a new value PACKAGE to the next available ZNAME instance attribute.

When finished updating both classes, refresh the Radia System Explorer. You will now be able to make connections within the USAGE domain.

ADMIN Domain Changes for a Pre-4.0 Radia Database

If you are importing a USAGE domain into a pre-version 4.0 Radia Database, the ADMIN domain requires some changes to enable connections between the USAGE domain classes. This appendix describes these changes in detail.

Changes need to be made to the following ADMIN domain classes:

- Name Lists (8) (ZLIST)
- Connection Rules (ZCONNECT)

ZLIST Class Changes for pre-4.0 Databases

Add three new instances to the ZLIST class.

1   Use the Radia System Explorer to navigate to and expand the ADMIN domain.

2   Right-click **Name List (8) (ZLIST)** and select **New Instance**. Add three new instances named:

— CONNECT_UMCOLLCT_TO_RULES

— CONNECT_UMFLTRUL_TO_RULES

— CONNECT_UMFLTSET_TO_RULES

3   In the tree view, double-click each new instance and add the following ZNAME values as shown here.

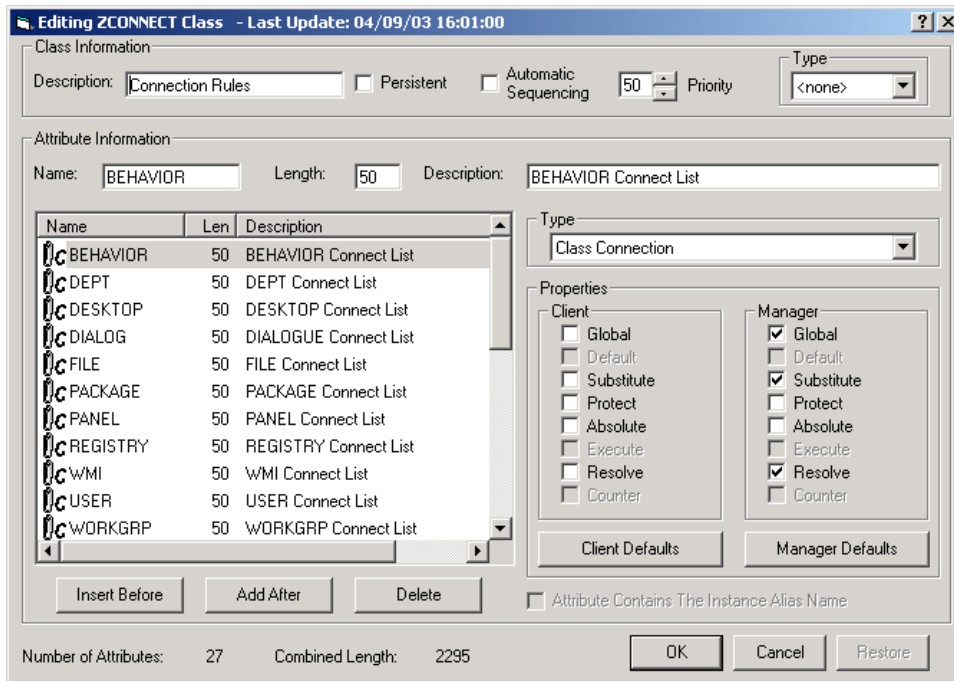| Instance	ZNAME	ZNAME Value
CONNECT_UMCOLLCT_TO_RULES	ZNAME01 ZNAME02 ZNMAE03	UMDBASE UMFLTSET UMDESTPT
CONNECT_UMFLTRUL_TO_RULES	ZNAME01	UMFLTCRI
CONNECT_UMFLTSET_TO_RULES	ZNAME01	UMFLTRUL

4   Double-click **CONNECT_ZSERVICE_TO_RULES** and add a new value UMCOLLCT to the next available ZNAME instance attribute.

ZCONNECT Class Changes for pre-4.0 Databases

Edit the ZCONNECT class to include the new USAGE domain classes.
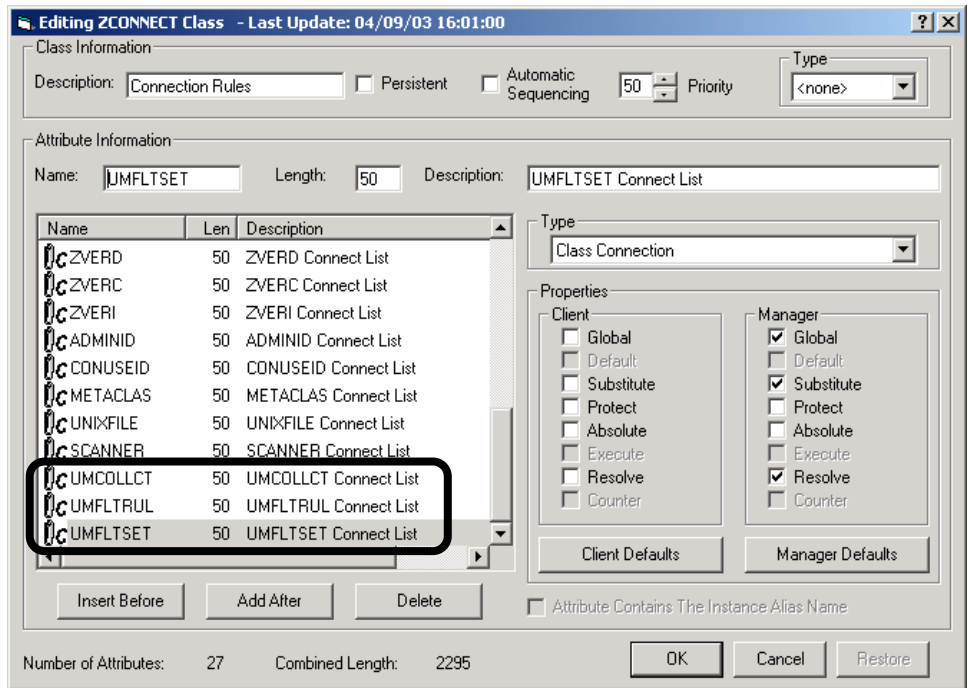
1   Use the Radia System Explorer to navigate to the PRIMARY file, ADMIN domain.

2   Double-click the ADMIN domain.

3   Right-click **Connection Rules (ZCONNECT)**, and select **Edit Class**.

4 Use the scroll bar to scroll to the bottom of the list of attributes.

5 Highlight the last attribute in the list by left-clicking the name of the attribute.

6 Click **Add After** to add a new attribute.

7 Add three new attributes to the list with the information listed here.

Name	Length	Description	Type
UMCOLLCT	50	UMCOLLCT Connect List	Class Connection
UMFLTRUL	50	ULFMTRUL Connect List	Class Connection
UMFLTSET	50	UMFLTSET Connect List	Class Connection

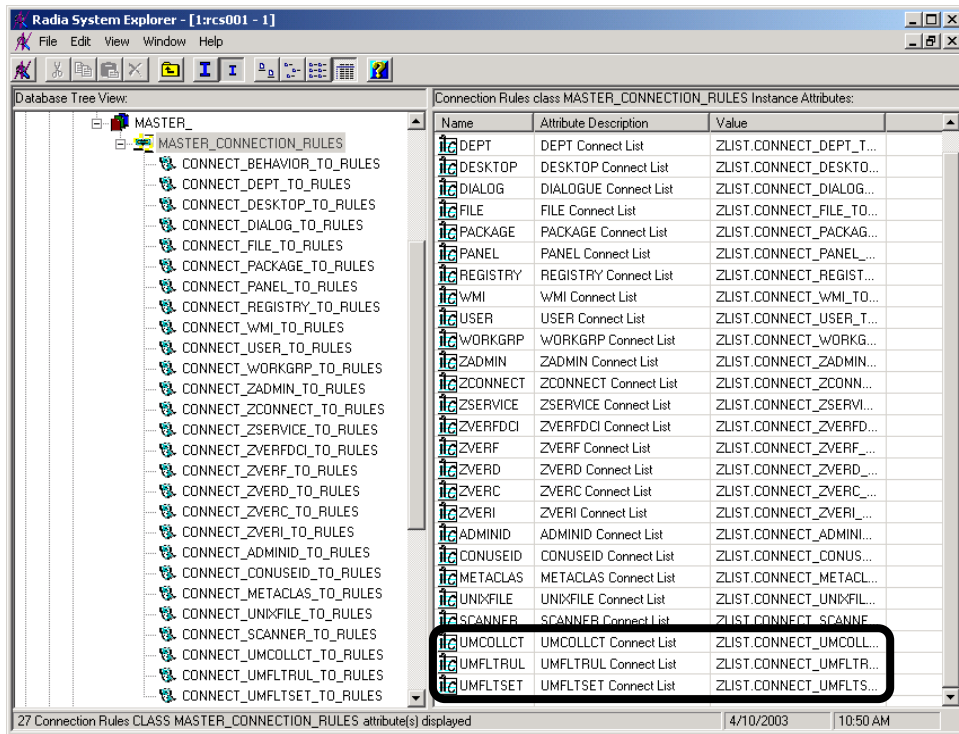When you are finished adding the new attributes, the list should look like the list displayed in the figure below.

8   Click **OK** to close the Editing Class dialog box and save your changes.

9   In the tree view of the Radia System Explorer double-click **Connection Rules.**

10 Double-click **MASTER_.**

11 Right-click **MASTER_CONNECTION_RULES** and select **Edit Instance** to add the values for the three new instances. See below for the new instance values.

Name	Attribute Description	Value
UMCOLLCT	UMCOLLCT Connect List	ZLIST.CONNECT_UMCOLLCT_TO_RULES
UMFLTRUL	UMFLTRUL Connect List	ZLIST.CONNECT_UMFLTRUL_TO_RULES
UMFLTSET	UMFLTSET Connect List	ZLIST.CONNECT_UMFLTSET_TO_RULES

When finished adding the values, the MASTER_CONNECTION_RULES should appear like the list displayed in the figure below.

When finished updating both classes, refresh the Radia System Explorer. You will now be able to make connections within the USAGE domain.