
NetIQ Analysis Center

Administrator Guide

May 2017

Legal Notice

For information about NetIQ legal notices, disclaimers, warranties, export and other use restrictions, U.S. Government restricted rights, patent policy, and FIPS compliance, see <https://www.netiq.com/company/legal/>.

Copyright (C) 2017 NetIQ Corporation. All Rights Reserved.

For information about NetIQ trademarks, see <https://www.netiq.com/company/legal/>. All third-party trademarks are the property of their respective owners.

Contents

About NetIQ Corporation	7
About This Book and the Library	9
1 Introducing Analysis Center	11
2 Understanding Data Connections and Flow	13
3 Getting Started with Analysis Center	17
3.1 Getting Started Overview	17
3.2 Planning a Report	18
4 Planning the Installation	19
4.1 Distributing Analysis Center Components	19
4.2 Deciding Between Windows and SQL Authentication	20
4.2.1 Deciding Authentication Type For Connections Between Analysis Center Components	20
4.2.2 Deciding Authentication Type For Data Warehouse Installation	21
4.3 Account Requirements	23
4.3.1 Data Warehouse Installation	23
4.3.2 Reporting Center Installation	24
4.3.3 SQL Server Services	24
4.3.4 Connection to Data Mart Database	27
4.4 System Requirements	27
4.4.1 Planning Considerations	28
4.4.2 Hardware and Software Requirements	28
4.4.3 Supported Data Sources	33
4.5 Using Named Instances of SQL Server	33
4.6 SQL Server Licensing Considerations	33
4.7 Preparing Report Builder to Customize Reports	34
5 Installing Analysis Center	35
5.1 Overview of Analysis Center Installation	35
5.2 Installing Analysis Center	35
5.2.1 Downloading the Installer File	36
5.2.2 Running the Installation Program	36
5.2.3 Verifying the Installation	37
5.3 Maintaining the Analysis Center Installation	38
5.4 Configuring SQL Server Reporting Services	39
5.4.1 Configuring Report Deployment in SSRS	39
5.4.2 Configuring Email in SSRS	39
6 Upgrading to Analysis Center 3.0 or later	41
6.1 Understanding Analysis Center 3.0 or later Components	41
6.2 Upgrading Considerations	42
6.3 Backing Up Databases Before Upgrade	43

6.4	Upgrading Analysis Center.	43
6.5	Verifying Analysis Center Components Post Upgrade	44
7	Migrating Analysis Center Data	47
7.1	Understanding the Data Migration Process	47
7.2	Preparing for Migration.	47
7.3	Backing Up Databases Before Migration	48
7.4	Installing Analysis Center 3.0 or later.	49
7.5	Restoring Databases	49
7.6	Using the Data Migration Utility	50
7.7	Deploying Reports After Data Migration	52
8	Performing Administrative Tasks	53
8.1	Configuring Data Source	53
8.1.1	Managing Data Sources	53
8.1.2	Managing Jobs	61
8.1.3	Understanding ETL Filters	61
8.2	Managing Data	63
8.2.1	Delete Machines Task	63
8.2.2	Delete Metrics Task	63
8.2.3	Data Cleanup Task.	64
8.2.4	Rename Metrics Task	64
8.3	Processing Data Task.	65
8.4	Migrating the Reports to Reporting Center	65
8.5	Restricting the ETL Transaction Logs	65
9	Configuring Reporting Center Security	67
9.1	Understanding Reporting Center Security	67
9.1.1	Understanding Users and User Groups.	67
9.1.2	Understanding Permission Sets	68
9.2	Assigning Security to Objects	69
9.2.1	Tips for Planning Your Security Model	69
9.3	Applying Security	70
A	Adding Dynamic Legends to AppManager Knowledge Scripts	71
A.1	What is a Dynamic Legend?	71
A.2	Why Add Dynamic Legends?	71
A.3	Sample Dynamic Legend	72
A.4	Required XML Tags	72
A.5	Adding a Dynamic Legend to a Knowledge Script	73
B	Working with Legend Rules	75
B.1	Identifying a Legend Rule	75
B.2	Removing a Legend Rule.	76
B.3	Creating the Removal XML File	76
B.4	Issuing xmlcheckin	77
B.5	Adding a Legend Rule	78

C FIPS Solutions **79**

C.1 Installation and Configuration Issues79

C.2 SSRS Report Manager Issue.80

C.3 Unable to open Analysis Center 2.9 console after an upgrade80

C.4 ETL Job Failure80

About NetIQ Corporation

We are a global, enterprise software company, with a focus on the three persistent challenges in your environment: Change, complexity and risk—and how we can help you control them.

Our Viewpoint

Adapting to change and managing complexity and risk are nothing new

In fact, of all the challenges you face, these are perhaps the most prominent variables that deny you the control you need to securely measure, monitor, and manage your physical, virtual, and cloud computing environments.

Enabling critical business services, better and faster

We believe that providing as much control as possible to IT organizations is the only way to enable timelier and cost effective delivery of services. Persistent pressures like change and complexity will only continue to increase as organizations continue to change and the technologies needed to manage them become inherently more complex.

Our Philosophy

Selling intelligent solutions, not just software

In order to provide reliable control, we first make sure we understand the real-world scenarios in which IT organizations like yours operate — day in and day out. That's the only way we can develop practical, intelligent IT solutions that successfully yield proven, measurable results. And that's so much more rewarding than simply selling software.

Driving your success is our passion

We place your success at the heart of how we do business. From product inception to deployment, we understand that you need IT solutions that work well and integrate seamlessly with your existing investments; you need ongoing support and training post-deployment; and you need someone that is truly easy to work with — for a change. Ultimately, when you succeed, we all succeed.

Our Solutions

- ♦ Identity & Access Governance
- ♦ Access Management
- ♦ Security Management
- ♦ Systems & Application Management
- ♦ Workload Management
- ♦ Service Management

Contacting Sales Support

For questions about products, pricing, and capabilities, contact your local partner. If you cannot contact your partner, contact our Sales Support team.

Worldwide:	www.netiq.com/about_netiq/officelocations.asp
United States and Canada:	1-888-323-6768
Email:	info@netiq.com
Website:	www.netiq.com

Contacting Technical Support

For specific product issues, contact our Technical Support team.

Worldwide:	www.netiq.com/support/contactinfo.asp
North and South America:	1-713-418-5555
Europe, Middle East, and Africa:	+353 (0) 91-782 677
Email:	support@netiq.com
Website:	www.netiq.com/support

Contacting Documentation Support

Our goal is to provide documentation that meets your needs. The documentation for this product is available on the NetIQ website in HTML and PDF formats on a page that does not require you to log in. If you have suggestions for documentation improvements, click **comment on this topic** at the bottom of any page in the HTML version of the documentation posted at www.netiq.com/documentation. You can also email Documentation-Feedback@netiq.com. We value your input and look forward to hearing from you.

Contacting the Online User Community

NetIQ Communities, the NetIQ online community, is a collaborative network connecting you to your peers and NetIQ experts. By providing more immediate information, useful links to helpful resources, and access to NetIQ experts, NetIQ Communities helps ensure you are mastering the knowledge you need to realize the full potential of IT investments upon which you rely. For more information, visit community.netiq.com.

About This Book and the Library

The *NetIQ Analysis Center Administrator Guide* provides conceptual information about the enterprise-wide reporting of the NetIQ Analysis Center product, based on data from NetIQ AppManager repositories.

Intended Audience

This book provides information for individuals responsible for understanding Analysis Center concepts, and for system administrators and users responsible for installing, configuring, and using Analysis Center for reporting on AppManager data.

Other Information in the Library

The library provides the following information resources:

NetIQ Analysis Center User Guide

Provides conceptual information about Analysis Center. This book provides information to help you plan and prepare reports.

Online Help

Provides context-sensitive information and step-by-step guidance for common tasks, as well as definitions for each field on each window.

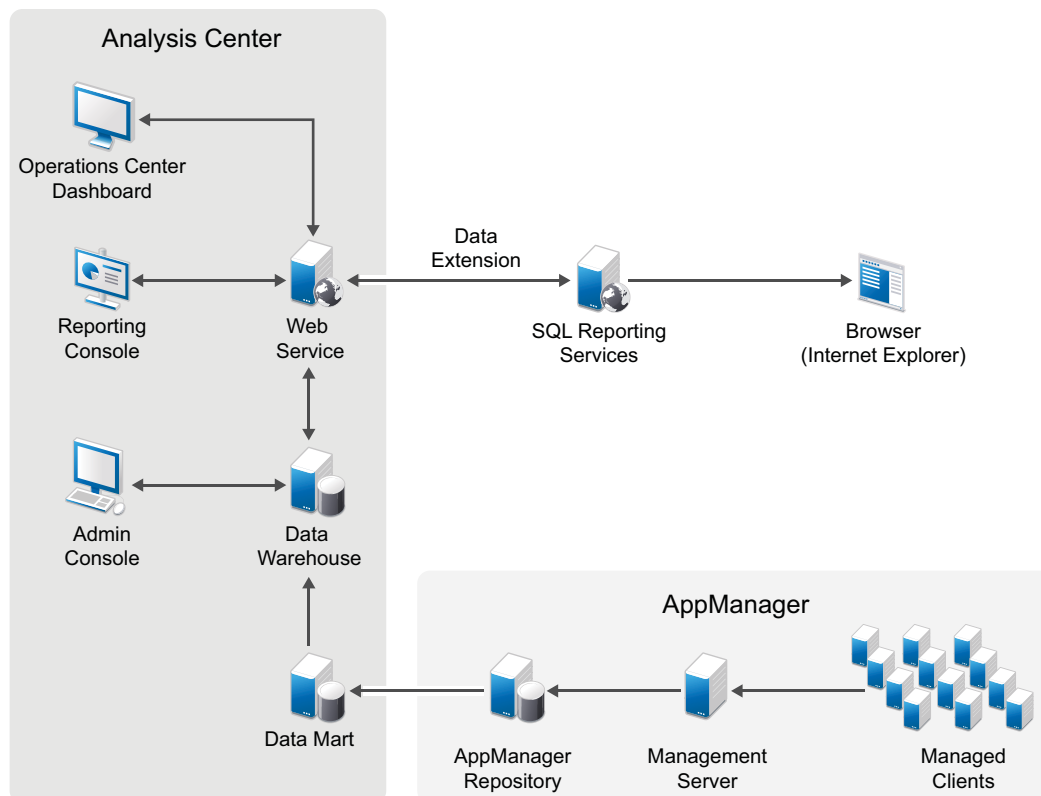
The Analysis Center library is available in Adobe Acrobat (PDF) format from the [Analysis Center Documentation](#) page of the NetIQ website.

1 Introducing Analysis Center

Analysis Center provides enterprise-wide reporting based on data from NetIQ AppManager repositories. It copies data from AppManager repositories to Data Marts, and from the Data Marts to the Analysis Center Data Warehouse. A Data Mart is a SQL Server database that Analysis Center creates for each AppManager Data Source. Reporting Console sends queries to the Data Warehouse to generate reports. The Operations Center Dashboard connects to the Web Service and enables you to view and manipulate the reports.

Analysis Center imports raw data from multiple AppManager repositories and displays data from single or multiple repositories in one report. Analysis Center transforms the data into useful information and publishes that information in graphical or tabular reports, when compared with the HTML reports that AppManager creates based on every collected data point. You can use the reports as it is or alter them to suit your needs. In a single report, you can select multiple Data Sources. To specify the AppManager repositories, add Data Source for each AppManager repository containing data you want to make available in reports. For more information about adding Data Sources, see [“Adding a Data Source” on page 55](#).

You can generate reports based on the data from multiple repositories or selected views, and view them in various folders in the Navigation pane. The following model illustrates the Analysis Center architecture.



For more information about Analysis Center architecture, see the [NetIQ Analysis Center User Guide](#).

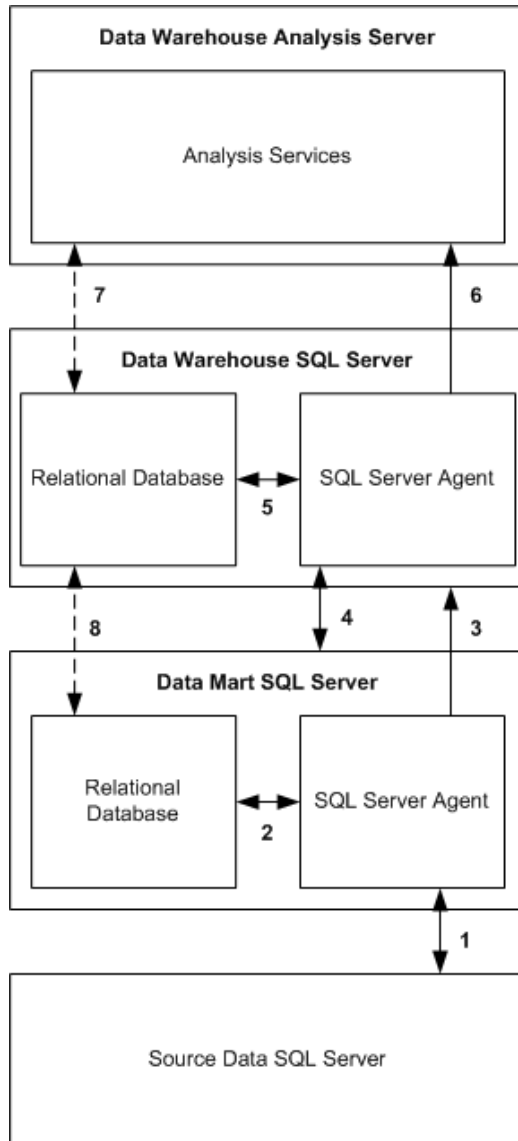
2 Understanding Data Connections and Flow

The various SQL Server and Analysis Services components make data connections. The SQL Server Agent on the Data Mart server reads from the source database, and writes to the Data Mart and Data Warehouse relational databases. The SQL Server agent owns the **ETL** job. The ETL job is the process by which data is extracted from an AppManager repository, transformed to a format appropriate to the Data Warehouse, and then loaded into the Data Warehouse.

The SQL Server Agent on the Data Warehouse server creates and reads from the Data Mart database, reads from and writes to the Data Warehouse relational database, and invokes the SSIS packages that process the cubes in the Data Warehouse multidimensional database (the OLAP processing job).

The Analysis Services on the multidimensional database server read data in the Data Warehouse relational database, as well as views in that database that are based on fact data in the Data Marts.

A legend describing the connections, and how Analysis Center gets its data follows the illustration.



Connection 1: Data Mart SQL Server Agent to source SQL Server: This connection is defined when you create a Data Source from the Analysis Center Console. This connection can use either Windows or SQL Server Authentication, depending on the security configuration of the source SQL Server and the choices you make during configuration of the Data Source.

This connection is used to copy data from the source database.

Connection 2: Data Mart SQL Server Agent to Data Mart SQL Server database . This connection is defined when you install the Analysis Center Data Warehouse. This connection can use either Windows or SQL Server Authentication, depending on the security configuration of the Data Mart SQL Server and the choices you make during the Data Warehouse installation.

This connection is used to write source data to the Data Mart database and to prepare that data for the Data Warehouse.

Connection 3: Data Mart SQL Server Agent to Data Warehouse SQL Server . This connection is defined when you install the Analysis Center Data Warehouse. This connection can use either Windows or SQL Server Authentication, depending on the security configuration of the Data Mart SQL Server and the choices you make during the Data Warehouse installation.

This connection is used to copy data from the Data Mart to the Data Warehouse relational database.

Connection 4: Data Warehouse SQL Server Agent to Data Mart SQL Server . This connection is defined when you install the Analysis Center Data Warehouse. This connection can use either Windows or SQL Server Authentication, depending on the security configuration of the Data Mart SQL Server and the choices you make during the Data Warehouse installation.

This connection is used to create the Data Mart databases.

Connection 5: Data Warehouse SQL Server Agent to Data Warehouse relational database . This connection is defined when you install the Analysis Center Data Warehouse. This connection can use either Windows or SQL Server Authentication, depending on the security configuration of the Data Warehouse SQL Server and the choices you make during the Data Warehouse installation.

This connection is used to further process data.

Connection 6: Data Warehouse SQL Server Agent to Analysis Services . This connection is defined when you install the Analysis Center Data Warehouse. This connection must use Windows authentication.

This connection is used to initiate cube and dimension processing.

Connection 7/8: Analysis Services to Data Warehouse SQL Server to Data Mart SQL Server . This connection is defined when you install the Analysis Center Data Warehouse. This connection can use either Windows or SQL Server Authentication, depending on the security configuration of the Data Warehouse and Data Mart SQL Servers and the choices you make during the Data Warehouse installation.

This connection is used to get data for cube and dimension processing from the Data Warehouse relational database and from the Data Mart database. The Data Warehouse relational database contains dimensional data and views to fact data in the Data Mart database; the Data Mart database contains fact data.

For more information about Analysis Center components, and how Analysis Center works, see the [NetIQ Analysis Center User Guide](#).

3 Getting Started with Analysis Center

This chapter describes how to begin working with Analysis Center, which tasks to perform first, how to plan and generate your reports.

- ♦ [Section 3.1, “Getting Started Overview,” on page 17](#)
- ♦ [Section 3.2, “Planning a Report,” on page 18](#)

3.1 Getting Started Overview

After you install Analysis Center, perform the following tasks to configure Analysis Center and begin generating reports.

- ☐ **Implement security:** Set the security settings to define what functionality is available to each user who logs into the Reporting Console. For more information, see [Chapter 9, “Configuring Reporting Center Security,” on page 67](#).
- ☐ **Configure the Data Source:** Add one or more AppManager Data Sources. For more information about Data Sources, see the [Section 8.1.1, “Managing Data Sources,” on page 53](#).
- ☐ **Define the report data:** Add one or more Data Source connections that points to specific database servers providing data for your reports. For more information about adding AppManager Data Source connections, see [Managing Data Source Connections](#) in the [NetIQ Analysis Center User Guide](#).
- ☐ **Plan your reports:** For more information about planning a report, see [Section 3.2, “Planning a Report,” on page 18](#).
- ☐ **Generate reports:** To generate a report, you must set the context for the report and then run the report. The report is displayed in the Results pane.

The context of a report refers to the computers, data streams, and time frame included in the report. Context might also include measures such as average or minimum. For more information about setting report context and generating reports, see the [NetIQ Analysis Center User Guide](#).

If several reports contain related data that is best interpreted when seen together, you can group all the reports on one page using the Dashboard feature.

- ☐ **Deploy reports:** After you have configured a report to provide the information you need, deploy the report to SQL Server Reporting Services (SSRS) to run it periodically on a specified schedule. Each iteration of the report can be delivered via subscription (by email or written to a file share) to one or more users. For more information about deploying reports, see [Deploying Reports](#) in the [NetIQ Analysis Center User Guide](#).

3.2 Planning a Report

Analysis Center 3.0 or later includes report templates that you can use as a base to create your own reports. These templates are available in the `AppManager Templates` folder located in the Navigation pane of Reporting Console.

- ☐ Decide the purpose of the report. What information do you want to display in the report? Have you already run the AppManager Knowledge Scripts that produces the data you want to reveal in a report?
- ☐ Review the AppManager Templates folder to determine which template best suits your report requirements. For more information about the report templates, see [Understanding Report Templates](#) in the [NetIQ Analysis Center User Guide](#).
- ☐ Select the desired template and click the **Run Report** option. The Base Report is displayed in the Results pane.
If the generated report serves your requirement, save it with a new and content-specific name within an appropriate folder.
- ☐ Deploy the report to SQL Reporting Services to let other users access it.

4 Planning the Installation

Before you install Analysis Center, you must consider the following:

-
- ☐ The number of computers and SQL Servers you want to use for Analysis Center components such as console, databases, and related services.
 - ☐ The types of login accounts, such as Windows or local system, you want to use for the various SQL Server services.
 - ☐ The type of authentication (Windows or Mixed Mode) you want to use for each SQL Server, and how you want to connect (Windows or SQL Server authentication) between the various SQL Servers.
 - ☐ The decision to use Report Builder, a component of Microsoft SQL Server Reporting Services, to customize Analysis Center reports.
-

For more information about planning Analysis Center installation, review the following sections:

- ♦ [Section 4.1, “Distributing Analysis Center Components,” on page 19](#)
- ♦ [Section 4.2, “Deciding Between Windows and SQL Authentication,” on page 20](#)
- ♦ [Section 4.3, “Account Requirements,” on page 23](#)
- ♦ [Section 4.4, “System Requirements,” on page 27](#)
- ♦ [Section 4.5, “Using Named Instances of SQL Server,” on page 33](#)
- ♦ [Section 4.6, “SQL Server Licensing Considerations,” on page 33](#)
- ♦ [Section 4.7, “Preparing Report Builder to Customize Reports,” on page 34](#)

4.1 Distributing Analysis Center Components

You can distribute the Analysis Center components, which includes Admin Console, Data Warehouse, and Reporting Center Components (Configuration Database, Data Extension, Reporting Console, and Web Service), in one of the following ways:

- ♦ All the components on a single computer.
- ♦ All the components on separate computers.
- ♦ In any combination on separate computers.

Your decision about how to distribute these components should depend on the volume of data that will move from one database to another, the frequency at which data will be processed, the number and frequency of reports that will run against the data, and the amount of data covered in reports.

In general, you can anticipate the following:

- ♦ **Data Mart database:** Each Data Mart requires disk space at least equal to the disk space used by its source of data. It demands significant memory and CPU resources for processing data.
- ♦ **Data Warehouse multidimensional database:** Requires minimal disk space. It demands significant memory and CPU resources to process cubes and queries.

- ♦ **Data Warehouse relational database:** Requires reliable network support to accommodate the volume of data traffic. It demands moderate to significant memory and CPU resources to process data.
- ♦ **Reporting Center Components:**
 - ♦ **Reporting Console:** Demands significant memory and CPU resources for presenting reports.
 - ♦ **Web Service:** Requires at least 512 MB RAM, and minimal disk and CPU resources.

For more information, see [Section 4.4, “System Requirements,” on page 27](#).

4.2 Deciding Between Windows and SQL Authentication

Before you install Analysis Center, you must decide about the type of authentication you want to use, set up the necessary accounts and permissions, configure each SQL Server to use the appropriate type of authentication, and configure the SQL Server services to use appropriate accounts. For more information, see [Section 4.3.3, “SQL Server Services,” on page 24](#).

To use Windows Authentication, do the following on each SQL Server:

- 1 Configure each Windows account as a login that requires access.
- 2 Specify appropriate Server Role for each login.
- 3 Configure whether to use Windows Authentication Mode or Mixed Mode.

To use SQL Server Authentication, do the following on each SQL Server:

- 1 Create the same login name and password to connect to each SQL Server. The login name and password must exist locally on each server.
- 2 Specify appropriate Server Role for each login.
- 3 Configure each SQL Server to use Mixed Mode Authentication.

4.2.1 Deciding Authentication Type For Connections Between Analysis Center Components

The following table lists the type of authentication you must configure for the different connections between Analysis Center components:

Connections	Authentication Type
During the Data Warehouse Installation	
♦ Data Warehouse SQL Server agent to Data Warehouse SQL Server	Windows or SQL Server Authentication
♦ Data Warehouse SQL Server agent to Data Warehouse Analysis Services	Windows Authentication
♦ Data Warehouse Analysis Services to Data Warehouse SQL Server	Windows or SQL Server Authentication
♦ Data Mart SQL Server agent to Data Mart SQL Server	Windows or SQL Server Authentication

Connections	Authentication Type
<ul style="list-style-type: none"> Data Mart SQL Server agent to Data Warehouse SQL Server 	Windows or SQL Server Authentication
During the Web Service Installation	
<ul style="list-style-type: none"> Web Service to Configuration Database 	Windows or SQL Server Authentication

4.2.2 Deciding Authentication Type For Data Warehouse Installation

During installation of the Data Warehouse, you must select one of following authentication types for connections between the Data Warehouse and the Data Mart SQL Server:

Option	Description
Default	<ul style="list-style-type: none"> This option is recommended for a fully distributed environment. The Data Warehouse SQL Server Agent and Analysis Services use Windows Authentication to connect to the Data Warehouse. The log on account for each service is used to make the connection. The SQL Server Agent login account must have administrative permissions for the Data Warehouse SQL Server and Analysis Server. However, if you do not initially configure the SQL Server Agent account with administrative permissions, you can delegate these permissions during the installation. The Data Mart SQL Server Agents use SQL Server Authentication to connect to the Data Mart and Data Warehouse SQL Servers. The installation program creates the required SQL Server login accounts and encrypts the passwords. The Data Warehouse and the Data Mart SQL Servers must use Mixed Mode security (Windows and SQL Server Authentication).

Option	Description
Windows Only	<ul style="list-style-type: none"> ◆ This option is not recommended for a fully distributed environment. To use Windows authentication for every connection between Analysis Center components, you must install all the components on the same computer. ◆ The login account for each service is used to make the connection. ◆ The Data Warehouse SQL Server Agent and Analysis Services use Windows Authentication to connect to the Data Warehouse. The log on account for each service is used to make the connection. The SQL Server Agent login account must have administrative permissions for the Data Warehouse SQL Server and Analysis Server. However, if you do not initially configure the SQL Server Agent account with administrative permissions, you can delegate these permissions during the installation. ◆ The Data Mart SQL Server Agents use Windows Authentication to connect to the Data Mart and Data Warehouse. Before you install Analysis Center, you must configure the login account for the Data Mart SQL Server as a member of the System Administrators server role for the Data Warehouse SQL Server and for each Data Mart SQL Server. ◆ The Data Warehouse SQL Server and SQL Server Agent, Analysis Services, any Data Mart SQL Servers and SQL Server Agents, and the Analysis Center Web Service must all use the same domain account for their service log-on accounts. The domain account used for these services must have administrative permissions for the Data Warehouse SQL Server, any Data Mart SQL Server, and the Analysis Server (System Administrators server role for the SQL Servers). Administrative permissions for Data Mart SQL Servers must be granted prior to installation. Other administrative permissions can be granted during installation. The domain account must be trusted for delegation. ◆ All SQL Server services must have a Service Principle Name. ◆ SQL Server Analysis Services must have a Service Principle Name. ◆ The Data Warehouse and Data Mart SQL Servers can be configured to use either Windows or Mixed Mode Authentication. ◆ All Analysis Center SQL Servers and the Analysis Server must be added to the Active Directory of their domain. ◆ Any domains that host Analysis Center computers must be configured for Kerberos security. ◆ On computer hosting an Analysis Center SQL Server, Microsoft Distributed Transaction Coordinator (DTC) must be configured for network access. ◆ All computers hosting Analysis Center components must be trusted for delegation. ◆ You cannot use Windows authentication for all the connections in a fully distributed environment because of the <i>double-hop</i> issue. Consider the following scenario: You install the Analysis Center components on three computers: Analysis Server on Computer A, Data Warehouse SQL Server on Computer B, Data Mart SQL Server on Computer C. For processing jobs, the Analysis Server makes a connection to the Data Warehouse SQL Server to get dimension data, and then makes a subsequent connection from the Data Warehouse SQL Server to the Data Mart SQL Server to get fact data. The credentials of the Analysis Services login account cannot be passed from Computer A to Computer B and then to Computer C.

Option	Description
Custom	<ul style="list-style-type: none"> ♦ You can use either Windows or SQL Server Authentication for each connection. ♦ If you use SQL Server authentication to connect to a SQL Server, that SQL Server must be configured to use Mixed Mode (Windows and SQL Server Authentication). ♦ Analysis Center does not manage SQL Server accounts. The passwords for SQL Server accounts are sent in clear text, which might pose security risks. ♦ If you use Windows Authentication, the SQL Server Agent login account must have administrative permissions for the Data Warehouse SQL Server and Analysis Server (System Administrators server role for the SQL Server). If you do not initially configure the SQL Server Agent account with administrative permissions, you can do so later in the installation. Before you install Analysis Center, you must configure the login account for the Data Mart SQL Server Agent as a member of the System Administrators server role for the Data Warehouse SQL Server and for each Data Mart SQL Server. ♦ In this case, you must have previously configured the Windows and/or SQL Server accounts as members of the System Administrators server role for each relevant SQL Server. ♦ If the Data Warehouse SQL Server Agent account does not already have SQL Server and Analysis Services administrative permissions, you can delegate those later in the installation. ♦ If you use SQL Server Authentication for a connection, the login name and password you specify for that connection must already be configured on the relevant SQL Server and must also belong to the System Administrators server role for that SQL Server. ♦ You cannot use a SQL Server account whose username contains spaces, single, or double quotes. You cannot use a SQL Server account whose password contains spaces. However, you can use a SQL Server account whose password contains single or double quotes.

4.3 Account Requirements

This section describes the account requirements for installing Data Warehouse, Reporting Center, and for the SQL Server services that support Analysis Center.

- ♦ [Section 4.3.1, “Data Warehouse Installation,” on page 23](#)
- ♦ [Section 4.3.2, “Reporting Center Installation,” on page 24](#)
- ♦ [Section 4.3.3, “SQL Server Services,” on page 24](#)
- ♦ [Section 4.3.4, “Connection to Data Mart Database,” on page 27](#)

4.3.1 Data Warehouse Installation

To install Data Warehouse, you must have administrative access to the computer on which you are installing the components. You can use either a domain or local administrator account.

During installation, you are prompted to use either Windows or SQL Authentication to connect to the SQL Server. If you use Windows Authentication, the account with which you are running the installation must belong to the System Administrators group for the SQL Server. If you use SQL Authentication, you must specify a SQL Server account that belongs to the System Administrators group for the SQL Server.

Ensure that the SQL Server account that you use to login must comply with the following:

- ♦ The user name must not contain spaces, single quotes, or double quotes.
- ♦ The password must not contain spaces or ampersand. However, it can contain single quotes or double quotes.

You can install the multidimensional database on a local or remote computer.

4.3.2 Reporting Center Installation

The following table lists the accounts you need to create or identify before installing Reporting Center.

Account	Description	Requirement
Console Account	Account that connects to the Web Service to display and use the Reporting Console.	<ul style="list-style-type: none">♦ Ability to log into the Web Service.
Database Installer Account	Account you log in with to run the setup program that creates the Configuration Database.	<ul style="list-style-type: none">♦ System Administrator privileges on the SQL server where you install the Configuration Database.♦ Local administrative permissions on the computer where you run the setup program.
Web Service Installer Account	Account you log in with to run the setup program that creates the Web Service and also configures the Web Service account in the Configuration Database.	<ul style="list-style-type: none">♦ System Administrator privileges on the SQL server where you install the Web Service.♦ Local administrative permissions on the computer where you run the setup program.
Web Service User Account	Account that the Web Service uses to retrieve data from the reporting database.	<p>None. If the account does not exist, the setup program creates it and assigns the following roles:</p> <ul style="list-style-type: none">♦ <code>dbcreator</code> and <code>bulkadmin</code> on the SQL server.♦ <code>db_owner</code> on the Configuration Database.

4.3.3 SQL Server Services

This section describes the permissions required for the various SQL Server service login accounts in varied distribution scenarios. Each example assumes one instance of SQL Server or Analysis Services on a computer.

If you distribute components across different instances of SQL Server on the same computer, the same requirements for permissions apply server to server. For example, from the Data Mart SQL Server to the Data Warehouse SQL Server.

Non-Distributed Scenario

This scenario considers the following:

- ♦ Source database and Analysis Center databases (SQL Server and Analysis Server) all on one computer
- ♦ Source database on one computer and all Analysis Center databases (SQL Server and Analysis Server) on another computer

Authentication Mode	Required permissions
Windows Only Authentication	<p>SQL Server</p> <ul style="list-style-type: none">♦ Member of System Administrators server role for the SQL Server.♦ (Conditional) db_datareader database role for the source database: This is applicable only if source database is on one computer and all Analysis Center databases on another computer. <p>SQL Server Agent</p> <ul style="list-style-type: none">♦ Member of System Administrators server role for the SQL Server.♦ (Conditional) db_datareader database role for the source database: This is applicable only if source database is on one computer and all Analysis Center databases on another computer. <p>SQL Server Analysis Services</p> <ul style="list-style-type: none">♦ Member of System Administrators server role for the SQL Server. <p>NOTE: All services must use the same domain account.</p>
SQL Server and Windows Authentication	<p>SQL Server can run as Local System.</p> <p>SQL Server Agent and SQL Server Analysis Services must have the same permissions specified above for Windows Only Authentication mode.</p>

Distributed Scenario

This scenario considers the following:

- ♦ Source database on first computer, Data Mart on second computer, Data Warehouse on third computer
- ♦ Source database and each Analysis Center database on a separate Computer

Data Mart computer (SQL Server):

Authentication Mode	Required Permissions
Windows Only Authentication	<p>SQL Server</p> <p>No special requirements.</p> <p>SQL Server Agent</p> <ul style="list-style-type: none"> ♦ Member of System Administrators server role for the Data Mart SQL Server. ♦ Member of System Administrators server role for the Data Warehouse SQL Server. ♦ db_datareader database role for the source database.
SQL Server and Windows Authentication	<p>SQL Server can run as Local System.</p> <p>SQL Server Agent must have the same permissions specified above for Windows Only Authentication mode.</p>

Data Warehouse computer (SQL Server and Analysis Server) or Data Warehouse relational database computer (SQL Server):

Authentication Mode	Required Permissions
Windows Only Authentication	<p>SQL Server</p> <ul style="list-style-type: none"> ♦ Member of System Administrators server role for the Data Warehouse SQL Server. ♦ (Conditional) Member of System Administrators server role for the Data Mart SQL Server. This is applicable only if the source database and each of the Analysis Center database are on a separate computer. ♦ db_datareader database role for the source database <p>SQL Server Agent</p> <ul style="list-style-type: none"> ♦ Member of System Administrators server role for the Data Warehouse SQL Server. ♦ Member of System Administrators server role for the Data Mart SQL Server. ♦ db_datareader database role for the source database. <p>(Conditional) SQL Server Analysis Services</p> <p>This is applicable only if source database is on first computer, Data Mart on second computer, and Data Warehouse on third computer.</p> <ul style="list-style-type: none"> ♦ Member of System Administrators server role for the Data Warehouse SQL Server. <p>NOTE: All services must use the same domain account.</p>

Authentication Mode	Required Permissions
SQL Server and Windows Authentication	<p>SQL Server and SQL Server Agent must have the same permissions specified above for Windows Only Authentication mode.</p> <p>SQL Server can run as Local System.</p> <p>(Conditional) SQL Server Analysis Services must use Windows authentication and have permissions specified above for Windows Only Authentication mode. This is applicable only if source database is on first computer, Data Mart on second computer, and Data Warehouse on third computer.</p>

(Conditional) Data Warehouse multidimensional database computer (Analysis Server). This is applicable only if the source database and each of the Analysis Center database are on a separate computer

Authentication Mode	Required Permissions
Windows Only Authentication	<p>SQL Server Analysis Services</p> <ul style="list-style-type: none"> ◆ Member of System Administrators server role for the Data Warehouse SQL Server. ◆ Member of System Administrators server role for the Data Mart SQL Server.
SQL Server and Windows Authentication	SQL Server Analysis Services must have the permissions specified above for Windows Only Authentication mode.

4.3.4 Connection to Data Mart Database

During the creation of a Data Source, you are asked to specify whether the Data Warehouse SQL Server Agent connects to the Data Mart database using Windows or SQL Server authentication. If you use SQL Server authentication, the login name you specify must be a System Administrator for the Data Mart SQL Server.

4.4 System Requirements

You can install the Analysis Center components either individually or in any combination on the same computer or different computers. The following table identifies the Analysis Center components supported on 32-bit and 64-bit platforms:

Component	32-bit	64-bit
Console	Yes	Wow64
Web Service	Yes	Yes
Data Warehouse	Yes	Yes
Data Extension	Yes	Yes

NOTE: On Windows Server 2012 R2 computer, you can only install the Reporting Center components.

- ♦ [Section 4.4.1, “Planning Considerations,” on page 28](#)
- ♦ [Section 4.4.2, “Hardware and Software Requirements,” on page 28](#)
- ♦ [Section 4.4.3, “Supported Data Sources,” on page 33](#)

4.4.1 Planning Considerations

Consider the following information as you prepare to install Analysis Center:

- ♦ Wow64 refers to a 32-bit application emulated on Windows 64-bit platform.
- ♦ If you distribute Analysis Center components across multiple computers, you must enable the Remote Registry Service on the computers. Otherwise, the installation fails.
- ♦ If you anticipate that your data storage requirements will be significant, NetIQ Corporation recommends SQL Analysis Services Enterprise Edition. If you need assistance determining this, please contact NetIQ Technical Support.
- ♦ If you are reporting on data generated from AppManager version 6.5 UNIX agents, Analysis Center requires that you apply hotfix 51991 for Sun Solaris, HP-UX or Linux, or AppManager for UNIX 6.5 for AIX Service Pack 1 for IBM AIX. If you do not apply the hotfix, the Analysis Center reports display incorrect or missing UNIX data. For more information about obtaining the hotfix, contact NetIQ Technical Support.
- ♦ When you install Analysis Center on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, or Windows Server 2012 R2, install Internet Information Services (IIS) 7.0 or 8.0 on the Windows Server computer with the following Role Services selected:
 - ♦ Application Development: ASP.NET
 - ♦ Security: Windows Authentication
 - ♦ IIS 6 Management Compatibility
- ♦ When you install Analysis Center on Windows Server 2012 or Windows Server 2016, you must install .NET Framework version 2.0 and 3.5 prior to the installation of Analysis Center.
- ♦ Microsoft SQL Server 2016 ADOMD.NET requires .NET Framework version 4.0 as a prerequisite. Ensure that this requirement is met before installing Analysis Center.

4.4.2 Hardware and Software Requirements

Review the following sections for the requirements and supported applications on x86 and x64 platforms for each component of Analysis Center.

- ♦ [“Reporting Center Components Computer” on page 28](#)
- ♦ [“Data Mart Computer or Data Warehouse Computer” on page 30](#)

Reporting Center Components Computer

	32-bit Computer	64-bit Computer
Screen Resolution	1024x768 or higher	1024x768 or higher

	32-bit Computer	64-bit Computer
Processor	600 MHz Pentium III-compatible or faster processor (1 GHz or faster processor recommended)	1-GHz AMD Opteron, AMD Athlon 64, Intel Xeon with Intel EM64T support, Intel Pentium IV with EM64T support processor or faster
Operating System	<p>One of the following operating systems:</p> <ul style="list-style-type: none"> ♦ Microsoft Windows Server 2008 ♦ Microsoft Windows Server 2003 <p>The Console also supports the following desktop operating systems:</p> <ul style="list-style-type: none"> ♦ Microsoft Windows 8.1 Enterprise ♦ Microsoft Windows 8 Enterprise ♦ Microsoft Windows 7 Enterprise 	<p>One of the following operating systems:</p> <ul style="list-style-type: none"> ♦ Microsoft Windows Server 2016 ♦ Microsoft Windows Server 2012 R2 ♦ Microsoft Windows Server 2012 ♦ Microsoft Windows Server 2008 R2 ♦ Microsoft Windows Server 2008 ♦ Microsoft Windows Server 2003 <p>The Console also supports the following desktop operating systems:</p> <ul style="list-style-type: none"> ♦ Microsoft Windows 8.1 Enterprise ♦ Microsoft Windows 8 Enterprise ♦ Microsoft Windows 7 Enterprise
Memory	1 GB or more; 2 GB recommended	1 GB or more; 2 GB recommended
Hard Disk	575 MB of free disk space	575 MB of free disk space
Additional Requirements		
.NET Framework	.NET Framework 4.0, 4.5, or 4.6.2	.NET Framework 4.0, 4.5, or 4.6.2
Configuration Database	<p>Configuration Database requires one of the following SQL Server versions:</p> <ul style="list-style-type: none"> ♦ Microsoft SQL Server 2014 ♦ Microsoft SQL Server 2012 ♦ Microsoft SQL Server 2008 R2 ♦ Microsoft SQL Server 2008 ♦ Microsoft SQL Server 2005 SP2 <p>Ensure that you install the SQL Server and the Windows operating system on 32-bit platform.</p>	<p>Configuration Database requires one of the following SQL Server versions:</p> <ul style="list-style-type: none"> ♦ Microsoft SQL Server 2016 ♦ Microsoft SQL Server 2014 ♦ Microsoft SQL Server 2012 ♦ Microsoft SQL Server 2008 R2 ♦ Microsoft SQL Server 2008 ♦ Microsoft SQL Server 2005 SP2 <p>Ensure that you install the SQL Server and the Windows operating system on 64-bit platform.</p>
Data Extension	Data Extension requires Microsoft SQL Server Reporting Services 2008 or later	

	32-bit Computer	64-bit Computer
Web Service	<p>The Web Service requires the following:</p> <ul style="list-style-type: none"> ♦ Microsoft Internet Information Services (IIS) 6.0 or later. For versions 7.0 or later, the following Role Services are required: <ul style="list-style-type: none"> ♦ Application Development: ASP.NET ♦ Management Tools: IIS 6 Metabase Compatibility ♦ Security: Windows Authentication ♦ Microsoft SQL Server 2008 ADOMD.NET or later ♦ Browser: Microsoft Internet Explorer 11.0, 10.0, 9.0, 8.0, 7.0 	<p>The Web Service requires the following:</p> <ul style="list-style-type: none"> ♦ Microsoft Internet Information Services (IIS) 6.0 or later. For versions 7.0 or later, the following Role Services are required: <ul style="list-style-type: none"> ♦ Application Development: ASP.NET ♦ Management Tools: IIS 6 Metabase Compatibility ♦ Security: Windows Authentication ♦ Microsoft SQL Server 2008 ADOMD.NET or later ♦ Browser: Microsoft Internet Explorer 11.0, 10.0, 9.0, 8.0, 7.0

NOTE: If you install the Console on a computer running Windows Server 2003 or later and plan to connect to a remote Web Service, set the Internet Explorer Security settings for **Internet** and **Local intranet** to **Low** on the computer where you want to install the console.

Data Mart Computer or Data Warehouse Computer

	32-bit Computer	64-bit Computer
Processor	600 MHz Pentium III-compatible or faster processor (1 GHz or faster processor recommended)	1-GHz AMD Opteron, AMD Athlon 64, Intel Xeon with Intel EM64T support, Intel Pentium IV with EM64T support processor or faster
Operating System	<ul style="list-style-type: none"> ♦ Windows Server 2008 ♦ Windows Server 2003 	<ul style="list-style-type: none"> ♦ Windows Server 2016 ♦ Windows Server 2012 ♦ Windows Server 2008 R2 ♦ Windows Server 2008 ♦ Windows Server 2003

	32-bit Computer	64-bit Computer
Memory	512 MB of RAM or higher (1 GB or higher recommended)	512 MB of RAM or higher (1 GB or higher recommended)
Hard Disk	<ul style="list-style-type: none"> ♦ Data Mart Computer: 350 MB free space or higher depending on the size of the AM repositories ♦ Data Warehouse Relational Database Computer: 350 MB free space or higher depending on the size of the Data Marts ♦ Data Warehouse Multi-dimensional Database Computer: 350 MB free space or higher depending on the size of the Data Warehouse 	<ul style="list-style-type: none"> ♦ Data Mart Computer: 350 MB free space or higher depending on the size of the AM repositories ♦ Data Warehouse Relational Database Computer: 350 MB free space or higher depending on the size of the Data Marts ♦ Data Warehouse Multi-dimensional Database Computer: 350 MB free space or higher depending on the size of the Data Warehouse
Other Requirements		
.NET Framework	<ul style="list-style-type: none"> ♦ Data Mart Computer: .NET Framework 2.0 Redistributable Package ♦ Data Warehouse Relational Database Computer: .NET Framework 4.0, 4.5, or 4.6.2 Redistributable Package ♦ Data Warehouse Multi-dimensional Database Computer: .NET Framework 2.0 Redistributable Package 	<ul style="list-style-type: none"> ♦ Data Mart Computer: .NET Framework 2.0 Redistributable Package ♦ Data Warehouse Relational Database Computer: .NET Framework 4.0, 4.5, or 4.6.2 Redistributable Package ♦ Data Warehouse Multi-dimensional Database Computer: .NET Framework 2.0 Redistributable Package
SQL Server	<ul style="list-style-type: none"> ♦ Data Mart Computer and Data Warehouse Relational Database Computer: The following are supported: <ul style="list-style-type: none"> ♦ SQL Server 2014 ♦ SQL Server 2012 ♦ SQL Server 2008 R2 ♦ SQL Server 2008 ♦ SQL Server 2005 SP2 	<ul style="list-style-type: none"> ♦ Data Mart Computer and Data Warehouse Relational Database Computer: The following are supported: <ul style="list-style-type: none"> ♦ SQL Server 2016 ♦ SQL Server 2014 ♦ SQL Server 2012 ♦ SQL Server 2008 R2 ♦ SQL Server 2008 ♦ SQL Server 2005 SP2

	32-bit Computer	64-bit Computer
SQL Server Integration and Analysis Services	<ul style="list-style-type: none"> ♦ Data Mart Computer and Data Warehouse Relational Database Computer: The following are supported: <ul style="list-style-type: none"> ♦ SQL Server Integration Services 2014 ♦ SQL Server Integration Services 2012 ♦ SQL Server Integration Services 2008 R2 ♦ SQL Server Integration Services 2008 ♦ SQL Server Integration Services 2005 SP2 ♦ Data Warehouse Multi-dimensional Database Computer: The following are supported: <ul style="list-style-type: none"> ♦ SQL Server 2014 Analysis Services ♦ SQL Server 2012 Analysis Services ♦ SQL Server 2008 R2 Analysis Services ♦ SQL Server 2008 Analysis Services ♦ SQL Server 2005 SP2 Analysis Services 	<ul style="list-style-type: none"> ♦ Data Mart Computer and Data Warehouse Relational Database Computer: The following are supported: <ul style="list-style-type: none"> ♦ SQL Server Integration Services 2016 ♦ SQL Server Integration Services 2014 ♦ SQL Server Integration Services 2012 ♦ SQL Server Integration Services 2008 R2 ♦ SQL Server Integration Services 2008 ♦ SQL Server Integration Services 2005 SP2 ♦ Data Warehouse Multi-dimensional Database Computer: The following are supported: <ul style="list-style-type: none"> ♦ SQL Server 2016 Analysis Services ♦ SQL Server 2014 Analysis Services ♦ SQL Server 2012 Analysis Services ♦ SQL Server 2008 R2 Analysis Services ♦ SQL Server 2008 Analysis Services ♦ SQL Server 2005 SP2 Analysis Services
Microsoft Visual C++	♦ Data Warehouse Relational Database Computer: Microsoft Visual C++ 2012 Update3 Redistributable Package	
MSTDC	Microsoft Distributed Transaction Coordinator (MSDTC) service	

NOTE:

- ♦ Successful copying AppManager data from a Data Mart to the Data Warehouse requires that the language editions, collation, sort order, and locale settings match. For example, if the Data Warehouse SQL Server is an English language edition and the Data Warehouse computer is set to the English locale, then the Data Mart SQL Server must also be an English language edition and the Data Mart computer must be set to the English locale.
- ♦ For SQL Server 2016 Analysis service cluster environment, apply the [Microsoft update \(https://support.microsoft.com/en-us/help/3205413/cumulative-update-3-for-sql-server-2016\)](https://support.microsoft.com/en-us/help/3205413/cumulative-update-3-for-sql-server-2016).
For more information on the Microsoft update, see the [Microsoft help \(https://support.microsoft.com/en-us/help/3196100/fix-exception-occurs-during-parallel-processing-of-partitions-if-a-column-is-re-encoded-in-sql-server-2016\)](https://support.microsoft.com/en-us/help/3196100/fix-exception-occurs-during-parallel-processing-of-partitions-if-a-column-is-re-encoded-in-sql-server-2016)

4.4.3 Supported Data Sources

Analysis Center supports Data Sources from NetIQ AppManager 7.0 and later. For more information, see [Section 8.1.1, “Managing Data Sources,” on page 53](#).

4.5 Using Named Instances of SQL Server

If you use named instances of SQL Server on different computers for any of the Analysis Center databases, you need to ensure that each client of a database can connect to that named instance.

Use the SQL Server Client Network Utility to configure connectivity from each client computer to each named instance of SQL Server. For example, from the Data Warehouse SQL Server computer to the SQL Server instance for the Data Mart.

To configure connectivity:

- 1 On the client computer, click **Start > Programs > Microsoft SQL Server > Client Network Utility**.
- 2 On the General tab, enable **TCP/IP** and set it as the first protocol.
- 3 Select **TCP/IP** and click **Enable**.
- 4 Click the arrows to move **TCP/IP** to the top of the **Enabled protocols by order** list.
- 5 On the Alias tab, click **Add** to open the Add Network Library Configuration dialog box.
- 6 In the **Server alias** field, specify the SQL Server\Instance name to which the client will connect. The same name is displayed in the **Server name** field.
- 7 In the Network libraries panel, select **TCP/IP**.
- 8 In the Connection parameters panel, specify the **Port number** through which the connection to the SQL Server is made.

If you do not know the port number, select **Dynamically determine port**.

NOTE: It is preferable to specify the port number. The process of dynamically determining the port might cause security alerts in circumstances where there is monitoring for port attacks. In circumstances where the client and server are separated by a firewall, the system administrator will need to know which port to open.

- 9 Click **OK** to close the Add Network Library Configuration dialog box.
- 10 Click **OK** to close the Client Network Utility dialog box.

4.6 SQL Server Licensing Considerations

There are a number of different licensing options you can use for your SQL Server environment. For example: per CPU, per user, or per device. You must choose an option based on your business requirements. The following table summarizes the connections to SQL Server components to help you decide the licensing type that suits your requirement.

This Analysis Center Component	Connects to this SQL Server Component
Data Warehouse SQL Server Agent	<ul style="list-style-type: none">♦ Each Data Mart SQL Server♦ The Data Warehouse SQL Server♦ Analysis Services

This Analysis Center Component	Connects to this SQL Server Component
Analysis Services	<ul style="list-style-type: none"> ♦ The Data Warehouse SQL Server ♦ Each Data Mart SQL Server
Data Mart SQL Server Agent	<ul style="list-style-type: none"> ♦ The associated source database SQL Server ♦ The associated Data Mart SQL Server ♦ The Data Warehouse SQL Server
Web Service	<ul style="list-style-type: none"> ♦ The Data Warehouse SQL Server ♦ Analysis Services
Data Extension	<ul style="list-style-type: none"> ♦ The database via the Web Service
Console	<ul style="list-style-type: none"> ♦ The database via the Web Service ♦ Reporting Services

4.7 Preparing Report Builder to Customize Reports

To customize Analysis Center reports, use the Report Builder component of SQL Server Reporting Services (SSRS). To use Report Builder on a computer, you must first install Visual Studio .NET 2005 or higher, then install SSRS and Analysis Center Data Extension on that computer. For more information, see “Customizing Reports” in the NetIQ Analysis Center User Guide.

5 Installing Analysis Center

Before you install Analysis Center, plan for the installation. For information about planning the installation, see [Chapter 4, “Planning the Installation,” on page 19](#).

This chapter provides information about installing and maintaining Analysis Center components:

- ♦ [Section 5.1, “Overview of Analysis Center Installation,” on page 35](#)
- ♦ [Section 5.2, “Installing Analysis Center,” on page 35](#)
- ♦ [Section 5.3, “Maintaining the Analysis Center Installation,” on page 38](#)
- ♦ [Section 5.4, “Configuring SQL Server Reporting Services,” on page 39](#)

For information about upgrading Analysis Center, see [Chapter 6, “Upgrading to Analysis Center 3.0 or later,” on page 41](#).

For information about migrating data to a new computer, see [Chapter 7, “Migrating Analysis Center Data,” on page 47](#).

5.1 Overview of Analysis Center Installation

You can install the following Analysis Center components either individually or in any combination on the same computer or different computers:

- ♦ Admin Console
- ♦ Data Warehouse
- ♦ Reporting Center components:
 - ♦ Configuration Database
 - ♦ Data Extension
 - ♦ Reporting Console
 - ♦ Web Service

5.2 Installing Analysis Center

Log into the computer on which you want to install Analysis Center by using an account that is a member of the local Administrators group. Before you run the Analysis Center setup program, do the following:

- ☐ Review the system requirements and verify that the computers where you plan to install Analysis Center components meet the requirements. For more information about the System Requirements, see [Section 4.4, “System Requirements,” on page 27](#).
- ☐ Close all open applications such as SQL Server Management Studio.

- ❑ You must install the Data Warehouse relational database on a local computer. However, you can install the Data Warehouse multidimensional database on a remote computer. To install the Data Warehouse in an SQL Server cluster named instance environment, do the following:
 1. Install the Data Warehouse on the active node.
 2. Install the Data Warehouse on the second node, which is now the passive node.
- ❑ (Conditional) If you install the Data Warehouse relational database on a SQL Server failover cluster, run the setup on each node of the cluster beginning with the node where SQL Server is in the active mode. If you install the Data Warehouse multidimensional database on an Analysis Services failover cluster, you must use the Remote Analysis Server option.
- ❑ To prevent the cube processing job from failing, do not install more than one Data Warehouse on a single Analysis Server.
- ❑ To install the Data Warehouse relational database, ensure that you have SQL Server System Administrator permission.
 If you connect to the SQL Server instance where you are installing using the Windows account under which you are running the installation, the Windows account must have System Administrator permissions for that SQL Server.
- ❑ The environment variable for the account under which you run the Analysis Center setup program must point to a `Temp` folder that does not contain any double-byte characters such as Japanese, Chinese, or Korean in the folder name or in the path to the folder.

5.2.1 Downloading the Installer File

To obtain the installation kit, do the following:

- 1 Download the self-extracting installer file from the [NetIQ Support Website \(http://www.netiq.com/Support/nac/\)](http://www.netiq.com/Support/nac/).
- 2 Run the installer file to create a `setup` folder that contains the `setup.exe` file.

5.2.2 Running the Installation Program

- 1 Using an account with local Administrator privileges, run `setup.exe` from the location where you saved the installation files.
- 2 Click **Start Installation**.
- 3 In the Install or Upgrade Analysis Center section, do one of the following:
 - ♦ To install Analysis Center on a 32-bit computer, click **NetIQ Analysis Center (x86) setup**.
 - ♦ To install Analysis Center on a 64-bit computer, click **NetIQ Analysis Center (x64) setup**.
- 4 In the License Agreement window, click **Yes** to accept the terms of the license agreement and proceed with the installation.
- 5 In the Feature Selection window, select the Analysis Center components you want to install.
- 6 (Conditional) If you selected the Data Warehouse component in [Step 5](#), follow the on-screen prompts to install the Data Warehouse. For more information about the options, click **Help**.
- 7 Review the Installation Summary page and then click **Install**.
- 8 (Conditional) If NetIQ Reporting Center is already installed on the computer or if you selected the Reporting Center component in [Step 5](#), follow the on-screen prompts to upgrade or install Reporting Center. The following table lists the information you need to provide during the

installation. You can install the Reporting Center components individually or in any combination on a local or remote computer. If you plan to install the Reporting Center components on different computers, you must install the components in the order listed in the following table:

Component	Required Information
Configuration Database	<ul style="list-style-type: none"> ◆ Credentials for the Database Installer Account. ◆ Name of the SQL Server instance where you plan to install the Configuration Database.
Web Service	<ul style="list-style-type: none"> ◆ Credentials for the Web Service Installer Account. ◆ Credentials for the Web Service User Account. ◆ Location of the Configuration Database.
Reporting Services Data Extension	<ul style="list-style-type: none"> ◆ Install the Reporting Services Data Extension on the computer where SQL Server Reporting Services (SSRS) is installed. However, if you plan to use the Report Designer component of SSRS to customize reports, install the Reporting Services Data Extension on the computer that hosts the Report Designer. Specify the SSRS URL in the following format: <code>http://<i>ServerName</i>/ReportServer</code> ◆ To deploy reports to SSRS and use the email subscription feature with Reporting Center, perform the following configuration tasks: <ul style="list-style-type: none"> ◆ Set up at least one System User account with the Content Manager role. ◆ Configure SSRS email settings. <p>Also, ensure that the SQL Agent is up and running. For more information about configuring SSRS, see Section 5.4, “Configuring SQL Server Reporting Services,” on page 39.</p>
Console	<ul style="list-style-type: none"> ◆ The Web Service server URL in the following format: <code>http://<i>ServerName</i>/NRCWebService</code>

For more information about specific accounts, see [Section 4.3.2, “Reporting Center Installation,”](#) on page 24.

9 Click **Finish**.

5.2.3 Verifying the Installation

When you install Analysis Center components, the product name that appears in **Control Panel > Programs and Features** depends on the components you installed:

Components Installed	Product Listed in Control Panel > Programs and Features
Admin Console	NetIQ Analysis Center
Data Warehouse	NetIQ Analysis Center
Admin Console and Data Warehouse	NetIQ Analysis Center
Admin Console and Reporting Center	NetIQ Analysis Center and NetIQ Reporting Center

Components Installed	Product Listed in Control Panel > Programs and Features
Admin Console, Data Warehouse, and Reporting Center	NetIQ Analysis Center and NetIQ Reporting Center
Data Warehouse and Reporting Center	NetIQ Analysis Center and NetIQ Reporting Center
Reporting Center	NetIQ Analysis Center and NetIQ Reporting Center

5.3 Maintaining the Analysis Center Installation

To modify an existing Analysis Center installation, run the Analysis Center setup program on a computer that hosts one or more Analysis Center components. However, you cannot use the Analysis Center installer to remove or repair the Reporting Center components. To remove the Reporting Center components, click **Control Panel > Programs and Features > NetIQ Reporting Center > Uninstall**.

If you choose to repair a Analysis Center 3.0 or later setup that has one or more Analysis Center 3.0 or later hotfixes applied, the setup reverts to the base version of the Analysis Center setup. You must reapply the hotfixes after repairing the setup.

For information about the Reporting Center components, see [Section 5.1, “Overview of Analysis Center Installation,” on page 35](#).

To modify an existing Analysis Center installation:

- Do one of the following to launch the Analysis Center installer:
 - Run the Analysis Center `setup.exe` file.
 - Click **Control Panel > Programs and Features > NetIQ Analysis Center**.
- Select one of the following and click **Next**:
 - Modify:** Lets you install Analysis Center components or uninstall the previously installed components, except the Reporting Center components. In the Component Selection dialog box, all of the installed Analysis Center components are selected by default. Select the additional components you want to install and deselect the components you want to uninstall.
However, to remove Reporting Center components you must use the Control Panel. Click **Control Panel > Programs and Features > NetIQ Reporting Center > Uninstall**.
 - Repair:** Lets you repair all the previously installed Analysis Center components except the Reporting Center components. You cannot repair an existing Reporting Center installation.
 - Remove:** Lets you remove all the previously installed Analysis Center components except the Reporting Center components.
To remove Reporting Center components you must use the Control Panel. Click **Control Panel > Programs and Features > NetIQ Reporting Center > Uninstall**.
- Follow the on-screen prompts.

When you remove the Analysis Center Data Warehouse component, the removal of SSIS packages and SQL Server Agent jobs take considerable time depending on the following:

- The number of packages and jobs
- The extent to which your Analysis Center environment is distributed among different computers

If you remove an existing Analysis Center installation in preparation for a new installation, ensure that all Analysis Center SQL databases, Data Marts, SSIS packages, and SQL Server Agent jobs have been removed before reinstalling Analysis Center.

5.4 Configuring SQL Server Reporting Services

To deploy reports to SSRS and set up email subscriptions, you must first configure SSRS to work with Reporting Center. The ability to deploy reports requires that each account that you use to log in to Reporting Center has corresponding account permissions in SSRS. Specifically, each Reporting Center account must, at a minimum, be designated in SSRS as System User with the Content Manager role.

The ability to set up email subscriptions requires that you configure the SSRS email settings in the Reporting Services Configuration Manager. Also, ensure that the SQL Server Agent is running.

For information about configuring SQL Server Reporting Services, review the following sections:

- ♦ [Section 5.4.1, “Configuring Report Deployment in SSRS,” on page 39](#)
- ♦ [Section 5.4.2, “Configuring Email in SSRS,” on page 39](#)

5.4.1 Configuring Report Deployment in SSRS

When you configure report deployment, you must first specify an account as System User or System Administrator at the site level. Then, assign that account the minimum role of Content Manager.

To enable report deployment in SSRS from Reporting Center:

- 1 In a Web browser, go to the SSRS URL, typically:
`http://ServerName/Reports`
- 2 Click **Site Settings** > **Security** > **New Role Assignment**.
- 3 Enter the user or group account that deploys reports from the Reporting Console to SSRS.
- 4 Select a role for that account and click **OK**.
- 5 On the main Reports page, click **Home** > **Properties** > **New Role Assignment**.
- 6 Enter the user or group account you just assigned as a System User or System Administrator at the site level.
- 7 Select **Content Manager** and click **OK**.

5.4.2 Configuring Email in SSRS

If you want to set up a subscription in Reporting Center to deliver your deployed reports by email on a schedule, you must configure the email settings in SSRS. However, if you do not configure email settings in SSRS, then Reporting Center only provides the option to set up a subscription for report delivery to a file share.

To configure email settings in SSRS:

- 1 Open the Reporting Services Configuration Manager and click **E-mail Settings**.
- 2 Specify the email address, SMTP delivery method, and SMTP server information and click **Apply**.
- 3 Click **Exit**.

6 Upgrading to Analysis Center 3.0 or later

The Analysis Center 3.2 installer lets you upgrade Analysis Center from the version 2.9 or later to the version 3.2. If you choose to upgrade from versions prior to 2.9, then you must first upgrade to version 2.9 before using this installer to upgrade to 3.2.

- ♦ [Section 6.1, “Understanding Analysis Center 3.0 or later Components,” on page 41](#)
- ♦ [Section 6.2, “Upgrading Considerations,” on page 42](#)
- ♦ [Section 6.3, “Backing Up Databases Before Upgrade,” on page 43](#)
- ♦ [Section 6.4, “Upgrading Analysis Center,” on page 43](#)
- ♦ [Section 6.5, “Verifying Analysis Center Components Post Upgrade,” on page 44](#)

6.1 Understanding Analysis Center 3.0 or later Components

Analysis Center 3.0 or later introduces new components such as Admin Console and Reporting Center Components in addition to the existing components:

- ♦ **Admin Console:** Lets you perform some of the administrative tasks, such as managing Data Sources, that you used to perform with Analysis Center Console. The functionality of NetIQ Analysis Center Administrator Utility is now available in Admin Console. If you run the Analysis Center 3.0 or later installer on a computer that has Analysis Center Console and NetIQ Analysis Center Administrator Utility installed, this Administrator Utility is removed. You must use Admin Console to perform administrative tasks that you previously performed using NetIQ Analysis Center Administrator Utility.
- ♦ **Data Warehouse:** Upgrades the existing Data Warehouse and installs the NQRConfig database on the same SQL Server instance. The installer also lets you migrate existing reports from Analysis Center Console to Reporting Console.
- ♦ **Reporting Center Components:** Includes the following NetIQ Reporting Center components:
 - ♦ **Reporting Console:** Installs a new console that lets you generate reports for which you previously used Analysis Center Console. NetIQ recommends that you use NetIQ Reporting Console instead of Analysis Center Console to generate reports.
 - ♦ **Reporting Center Configuration Database:** Installs the NQRConfig database, which stores report configuration information. This database is installed on the same SQL Instance where Data Warehouse is installed.

If you choose to install NetIQ Reporting Center on a computer from which NetIQ Reporting Center was previously uninstalled, the following message might get displayed:

```
An older version of NetIQ Reporting Center Database already exists.Do you
want to upgrade to Reporting Center 2.1?
```

This is because the Reporting Center database still exists in SQL Server even after Reporting Center has been successfully uninstalled. Click **Yes** to upgrade the database or click **No** to retain the database.

- ♦ **Reporting Center Data Extension:** Installs the Reporting Center Data Extension. If you previously installed Analysis Center Data Extension on versions of SQL Server prior to 2008, then the installer does not install the Reporting Center Data Extension. To install the Reporting Center Data Extension, run the installer on SQL Server 2008 or later.
- ♦ **Reporting Center Web Service:** Installs the Reporting Center Web Service.

When you upgrade to Analysis Center 3.0 or later, the existing components are upgraded and new components are installed. For information about Analysis Center components post upgrade, see [Section 6.5, “Verifying Analysis Center Components Post Upgrade,” on page 44.](#)

Depending on whether you installed Analysis Center components on a single computer or multiple computers, run the installer on the respective computers to accordingly upgrade the components. For more information about upgrading Analysis Center, see [Section 6.4, “Upgrading Analysis Center,” on page 43.](#)

6.2 Upgrading Considerations

Before upgrading to Analysis Center 3.0 or later, you must consider the following:

- ☐ Apply either the [Hotfix 7015655](#) or the [Hotfix 2.9.0.3](#) on the Analysis Center 2.9 setup.
- ☐ If you choose to upgrade Analysis Center and the SQL Servers that host Analysis Center components, you must first upgrade Analysis Center and then upgrade the SQL Servers. If you have Data Warehouse, Configuration database, AC_OLAP database, and Data Extension in a distributed environment, then you must ensure that all the SQL Servers hosting these components are on the same version.
- ☐ If Data Warehouse and Data Mart are distributed on different versions of SQL Server, you must install the SQL Server Client Tools on the Data Warehouse computer. The version of the Client Tools must match the SQL Server version of the Data Mart computer:
 - ♦ **SQL Server version later than 2005 is installed on the Data Mart computer:** On the Data Warehouse computer, install the following SQL Server Client Tools located under Shared Features in the SQL Server setup program:
 - ♦ Client Tools Connectivity
 - ♦ Client Tools SDK
 - ♦ SQL Client Connectivity SDK
 - ♦ **SQL Server 2005 is installed on the Data Mart computer:** On the Data Warehouse computer, install the following SQL Server 2005 Client Tools located under Client Components in the SQL Server 2005 setup program:
 - ♦ Connectivity Components
 - ♦ Legacy Components
 - ♦ Management Tools
 - ♦ Software Development Kit
- ☐ Back up the `AC_Warehouse` and `AC_Configuration` databases on Data Warehouse and all the Data Mart computers. For more information about backing databases, see [Section 6.3, “Backing Up Databases Before Upgrade,” on page 43.](#)
- ☐ To upgrade Data Warehouse in a SQL Server cluster environment, perform the following steps:
 1. Upgrade Data Warehouse on the active node.
 2. Upgrade the Data Warehouse on the second node, which is now the passive node.

❑ Keep a note of the following:

- ♦ The locations of the existing databases, for example, AC_OLAP, AC_Warehouse, location of SQL Server Analysis Services, and location of data sources.
- ♦ The URL of AC Web Service and SQL Server Reporting Services.
- ♦ The location of the NRQConfig database.
- ♦ The user names that are used to access the above databases and the services.

6.3 Backing Up Databases Before Upgrade

Before you upgrade Analysis Center, you must back up the AC_Warehouse and AC_Configuration databases on Data Warehouse and all the Data Mart computers. You must use a domain or local administrator account that belongs to the System Administrators group for the SQL Server.

To back up Analysis Center databases:

- 1 Launch the Analysis Center Console and perform the following tasks:
 - 1a Ensure that there are no items in the **Pending Data Sources** list. Right-click each Data Source in the **Pending Data Source** list and either activate or remove the Data Source.
 - 1b Disable all the Data Sources. You must disable a Data Source only after the ETL and OLAP Processing jobs for the Data Source have successfully run.
 - 1c Close the Analysis Center Console.
- 2 Start SQL Server Management Studio and do the following:
 - 2a Connect to the Data Warehouse SQL Server and disable the OLAP Processing job.
 - 2b Connect to the Data Mart SQL Server and disable the ETL Processing jobs for the Data Source.
- 3 Perform the following tasks on the AC_Warehouse, AC_Configuration, and each Data Mart database:
 - 3a Right-click the database you want to back up and click **Tasks > Backup Database**.
 - 3b On the **General** tab, click **Add**.
 - 3c In the Select Backup Destination dialog box, specify the file name and follow the on-screen prompts.

6.4 Upgrading Analysis Center

If you want to upgrade the SQL Servers hosting Analysis Center components, you must first upgrade Analysis Center and then upgrade the SQL Servers that have the following components installed:

- ♦ The SQL Server instance containing Data Warehouse and Configuration database.
- ♦ The SQL Server Analysis Services instance containing AC_OLAP database.
- ♦ The SQL Server Reporting Services instance containing Data Extension component.
- ♦ (Optional) The SQL Server instances containing Data Marts.

NOTE: All SQL Servers hosting Configuration database, AC_OLAP database, and Data Extension components must have the same version.

For more information about upgrading the SQL Server version, see the [Microsoft SQL Server documentation](#).

To upgrade Analysis Center:

- 1 Log into the computer where you want to upgrade Analysis Center by using an account that has SQL Server system administrator privileges.
- 2 Run the Analysis Center setup program and follow the on-screen prompts.
- 3 (Conditional) If you run the installer on a Windows Server 2003 computer that has Analysis Center 2.9 Data Extension and Security Update for Windows Server 2003 (KB2918614) installed, you must uninstall this security update for the installer to proceed. For more information about this security update, see the [Microsoft Support website](#).
- 4 (Conditional) If you run the installer on a SQL Server 2005 computer that has Analysis Center 2.9 Data Extension installed, Reporting Center Data Extension does not install on this computer. You must install Reporting Center Data Extension on SQL Server 2008 or later computer.
- 5 (Conditional) If Data Warehouse is installed on the computer, you are prompted to select the reports to migrate from Analysis Center Console to Reporting Console. To migrate the reports, select the reports and click **Migrate**. If you do not want to migrate the reports, click **Skip**.

You can also migrate reports after upgrading to Analysis Center 3.0 or later. To migrate the reports using the Report Migration utility after the upgrade, see the [Section 8.4, "Migrating the Reports to Reporting Center,"](#) on page 65.

IMPORTANT: Migrating the reports during the upgrade takes a considerable amount of time. NetIQ recommends you to skip the migration during the upgrade and use the Report Migration utility from the Admin Console to migrate the reports after the upgrade.

6.5 Verifying Analysis Center Components Post Upgrade

Analysis Center 3.0 or later provides new Admin Console, Reporting Console, Data Extension, and Web Service. When you upgrade to Analysis Center 3.0 or later, the existing components are upgraded and new components are installed. Review the following scenarios:

Scenario 1

Consider that you have a setup with all Analysis Center 2.9 components installed. When you run the Analysis Center 3.0 or later installer, the following actions take place:

- ♦ All existing Analysis Center 2.9 components are upgraded.
- ♦ If NetIQ Analysis Center Administrator Utility is already installed, then this utility is uninstalled and Admin Console is installed.
- ♦ The Reporting Center components (Reporting Console, Reporting Center Configuration Database, Reporting Center Data Extension, and Reporting Center Web Service) are installed.

Scenario 2

Consider that you have a setup with all Analysis Center 2.9 components and NetIQ Reporting Center 2.0 installed on the computer. When you run the Analysis Center 3.0 or later installer, the following actions take place:

- ♦ All existing Analysis Center 2.9 components are upgraded.

- ♦ If NetIQ Analysis Center Administrator Utility is already installed, then this utility is uninstalled and Admin Console is installed.
- ♦ The Reporting Center components (Reporting Console, Reporting Center Configuration Database, Reporting Center Data Extension, and Reporting Center Web Service) are upgraded.

For information about which components are installed and which components are upgraded, review the following table:

(Conditional) NetIQ Reporting Center 2.1 or later components are installed or upgraded only if you choose to continue with the NetIQ Reporting Center install or upgrade when the installer prompts.

	Components Installed Prior to Upgrade		Components Installed or Upgraded Post Upgrade	
	Analysis Center 2.9	NetIQ Reporting Center 2.0	Analysis Center 3.0 or later	(Conditional) NetIQ Reporting Center 2.1 or later
Console	✓	x	Upgrades Analysis Center Console and Installs Admin Console	(Conditional) Installs Reporting Console
	✓	✓	Upgrades Analysis Center Console and Installs Admin Console	(Conditional) Upgrades Reporting Console
Web Service	✓	x	Upgrades Analysis Center Web Service	(Conditional) Installs Reporting Center Web Service
	✓	✓	Upgrades Analysis Center Web Service	(Conditional) Upgrades Reporting Center Web Service
Data Extension	✓	x	Upgrades Analysis Center Data Extension	(Conditional) Installs Reporting Center Data Extension
	✓	✓	Upgrades Analysis Center Data Extension	(Conditional) Upgrades Reporting Center Data Extension
DB Components (Data Warehouse and Configuration database)	✓	x	Upgrades Configuration database and Data Warehouse	(Conditional) Installs Configuration database
	✓	✓	Upgrades Configuration database and Data Warehouse	(Conditional) Upgrades Configuration database

7 Migrating Analysis Center Data

The Data Migration Utility lets you move Analysis Center data from one server to another, typically in the following scenarios:

- ♦ From a 32-bit older version of Analysis Center to a 64-bit newer version of Analysis Center
- ♦ From an older version of SQL Server to a newer version of SQL Server

Review the following sections for information about how to migrate Analysis Center 2.9 data:

- ♦ [Section 7.1, “Understanding the Data Migration Process,” on page 47](#)
- ♦ [Section 7.2, “Preparing for Migration,” on page 47](#)
- ♦ [Section 7.3, “Backing Up Databases Before Migration,” on page 48](#)
- ♦ [Section 7.4, “Installing Analysis Center 3.0 or later,” on page 49](#)
- ♦ [Section 7.5, “Restoring Databases,” on page 49](#)
- ♦ [Section 7.6, “Using the Data Migration Utility,” on page 50](#)
- ♦ [Section 7.7, “Deploying Reports After Data Migration,” on page 52](#)

7.1 Understanding the Data Migration Process

The following list provides an overview of the data migration process:

- 1 Disable all the Analysis Center Data Sources. For more information, see [Section 7.2, “Preparing for Migration,” on page 47](#).
- 2 Back up your Analysis Center databases. For more information, see [Section 7.3, “Backing Up Databases Before Migration,” on page 48](#).
- 3 Install the newer version of Analysis Center on the new server. For more information, see [Section 7.4, “Installing Analysis Center 3.0 or later,” on page 49](#).
- 4 Restore the databases to the new server. For more information, see [Section 7.5, “Restoring Databases,” on page 49](#).
- 5 Run the Data Migration Utility and enable all the Analysis Center Data Sources. For more information, see [Section 7.6, “Using the Data Migration Utility,” on page 50](#).
- 6 Perform post-migration steps related to deployed reports. For more information, see [Section 7.7, “Deploying Reports After Data Migration,” on page 52](#).

7.2 Preparing for Migration

Ensure that you meet the following prerequisites before you back up the Analysis Center 2.9 databases and run the Data Migration Utility:

- ☐ There are no pending Data Sources. In the Analysis Center 2.9 Console, right-click each pending Data Source and either activate or remove it.
- ☐ All the Data Sources are disabled. After the ETL and OLAP processing jobs that are running for each Data Source are complete, use the Analysis Center Console to disable the Data Sources. Close all open Analysis Center Consoles.

- ❑ The collation order of the source SQL Server computer (that contains the current version of the Analysis Center databases) and the target SQL Server computer (for the newer version of Analysis Center databases) is the same. You can define the SQL Server collation order when you install SQL Server. The default collation order is based on the locale setting of the operating system. You cannot change the collation order after installation. If the collation orders do not match, reinstall SQL Server. For more information about the collation order, see the [Microsoft SQL Server documentation](#).
- ❑ The SQL Server account for performing the upgrade has db_owner permissions on the AC_Configuration and AC_Warehouse databases.

7.3 Backing Up Databases Before Migration

Before you migrate data, back up the following databases of your current version of Analysis Center using a domain or local administrator account that belongs to the System Administrators group for the SQL Server:

- ♦ AC_Warehouse and AC_Configuration databases on the Data Warehouse
- ♦ All Data Mart databases
- ♦ AC_OLAP database

To back up the Analysis Center databases:

- 1 Start SQL Server Management Studio.
- 2 Connect to the Data Warehouse SQL Server and disable the OLAP Processing job.
- 3 Ensure that the ETL Jobs are disabled.
- 4 Perform the following tasks on the AC_Warehouse, AC_Configuration, and each Data Mart database:
 - 4a In the Object Explorer, expand **Databases**.
 - 4b Right-click the database you want to back up and select **Tasks > Back up**.
 - 4c In the **Back Up Database - Database Name** window, select **General** page. In the **Destination** group box, click **Add**. In the **Select Backup Destination** dialog box, specify the file name and click **OK**.
- 5 Perform the following tasks on the AC_OLAP database:
 - 5a Log in to an SQL Server Analysis Services (SSAS) instance from the SQL Server Management Studio.
 - 5b Right-click the SSAS database you want to back up.
 - 5c Select **Back Up**.

The selected database name appears in the **Database** option. Specify the name of the **Backup file**. If you do not specify the path, the backup files are saved in a default folder. For example, C:\Program Files\Microsoft SQL Server\MSSQL.2\OLAP\Backup.

7.4 Installing Analysis Center 3.0 or later

To install Analysis Center 3.0 or later in preparation for restoring the databases on the new computer:

- 1 Run the Analysis Center 3.0 or later setup program and install Analysis Center 3.0 or later on the *new* Data Warehouse computer using the same installation parameters used for the older version of the Data Warehouse computer. You can specify new locations for the Analysis Center components.
- 2 After the first successful completion of the OLAP Processing job, disable the job on the Analysis Center 3.0 or later Data Warehouse computer.
- 3 (Optional) Back up the Analysis Center 3.0 or later `AC_Configuration` and `AC_Warehouse` SQL databases so that you have a copy of these databases at the time of the initial installation.
- 4 Connect to SQL Server using an account that has system administrator privileges.

7.5 Restoring Databases

IMPORTANT: The newly installed SQL Server must have the same collation or sort order as defined in the source databases that you want to restore. For more information about the collation order, see [Section 7.2, “Preparing for Migration,” on page 47](#).

To restore the backed up databases:

- 1 Start SQL Server Management Studio and connect to the SQL Server.
- 2 Expand the SQL Server instance where the `AC_Warehouse` and `AC_Configuration` databases are located.
- 3 Right-click the database you want to restore and select **Tasks > Restore > Database**.
- 4 In the **Destination for restore** group box, specify the database name in the **To Database** field.
- 5 In the **Source for restore** group box, select **From device** and click [...].
- 6 In the **Specify Backup** dialog box:
 - 6a Select **File** in the Backup Media list.
 - 6b Click **Add** to browse for the database backup file.
 - 6c Click **OK**.
- 7 Select **Restore** in the **Select the backup sets to restore** group box.
- 8 Click **Options** in **Select a page**.
- 9 Select **Overwrite the existing database** in the **Restore options** group box and retain the default options in the **Recovery state** group box to restore the following databases and click **OK**:
 - ♦ `AC_Configuration` database of the older version of Analysis Center to Analysis Center 3.0 or later `AC_Configuration` database.
 - ♦ `AC_Warehouse` database of the older version of Analysis Center to Analysis Center 3.0 or later `AC_Warehouse` database.
- 10 Repeat [Step 2](#) through [Step 9](#) to restore each of the Data Mart databases.
- 11 To restore Analysis Service Database (`AC_OLAP`):
 - 11a Use the SQL Server Management Studio to connect to SQL Server Analysis Service Instance.
 - 11b In the Object Explorer, right-click the **Databases** node and select **Restore**.

- 11c** In the **Restore Database** window, click **Browse** next to the **Backup file** option in the **Restore Source** group box.
- 11d** In the **Locate Databases Files** window, specify the path where the AC_OLAP database backup file is stored, and click **OK** to save the Restore Source information.
- 11e** Click **Browse** next to the **Storage Location** option in the **Restore Target** group box.
Select the path where you want to restore the Analysis Service database. Click **OK** to save the changes and return to the **Restore Database** window.
- 11f** Select **Allow database overwrite**.
- 11g** Click **OK** to restore the Analysis Service Database.
- 11h** Edit the connection string of the AC_OLAP database to point it to the correct Warehouse. To do this, on the Analysis Services for the AC_OLAP database, expand the node. Go to **Data Sources** node and expand it. Right-click **DS_ACWarehouse**, click **Properties** and accordingly modify the value for the connection string. For example:
- ♦ On SQL Server 2008 computer, specify the following values:
 - ♦ **Provider:** Native OLE DB\SQL Server Native Client 10.0
 - ♦ **Server Name:** *nameServer\instance* where AC_Warehouse DB is located
 - ♦ **DB Name:** AC_Warehouse
 - ♦ On SQL Server 2012 computer, specify the following values:
 - ♦ **Provider:** Native OLE DB\SQL Server Native Client 11.0
 - ♦ **Server Name:** *nameServer\instance* where AC_Warehouse DB is located
 - ♦ **DB Name:** AC_Warehouse
- 11i** Click **OK**.

7.6 Using the Data Migration Utility

After you restore the databases, run the Data Migration Utility to update the server configuration. You must run the Data Migration utility in the following two modes:

- ♦ **Migration Mode:** To migrate data.
- ♦ **Post Migration Mode:** To configure SQL Server Reporting Services (SSRS) and to retain the aggregate values of the previous version of the Analysis Center data sources.

To migrate data and configure SSRS:

- 1 Launch the Data Migration Utility.
- 2 In the Welcome dialog box, click **Migration > Next**.
- 3 Specify the account to use for logging on to the new Data Warehouse instance and click **Next**.

The following table lists the information you need to provide:

Option	Required Information
New Data Warehouse Server Name	Specify a valid name, in format <i>ServerName / Instance</i> , for the new Data Warehouse instance where you want to migrate data from a previous installation.
Login Using Windows or SQL Server Authentication	Select the authentication method for the account to connect to the new Data Warehouse instance.

Option	Required Information
Login Name and Password	<p>If you select Login Using SQL Server Authentication, specify the login name and password for the account.</p> <p>The login name must have write permissions for the <code>AC_Configuration</code> and <code>AC_Warehouse</code> databases.</p>
Test Connection	Click Test Connection to verify that the Data Warehouse instance is accessible.
Analysis Server Name	Specify a valid name, in format <i>ServerName/Instance</i> , for the Analysis Services instance where Analysis Center 3.0 or later is installed.

- 4 In the Data Source dialog box, review the list of Data Sources in the **Data Source Name** column, specify the names for the new Data Mart instance and Data Mart database, and then click **Next**. The following table lists the information you need to provide:

Option	Required Information
New Data Mart Server Name	Specify the name, in format <i>ServerName/Instance</i> , for the new Data Mart instance where you restored the Data Mart database backups.
New Data Mart Database Name	Specify the name for the new Data Mart database that you restored.
Login Name and Password	Specify the login name and password for the Data Source if you are using SQL Server Authentication.

- 5 In the Input Summary dialog box, review the details of the Data Warehouse, Data Sources, and Analysis Services instances to migrate. Click **Migrate** to start migrating data.
- 6 Review the Results Summary and click **Finish** to exit the Data Migration Utility.
- 7 On the instance where you installed the Analysis Center 3.0 or later Data Warehouse, run the Analysis Center 3.0 or later setup program in **Repair** mode.
- 8 Launch the Data Migration Utility again. In the Welcome dialog box, click **Post Migration** and click **Next**.
- 9 Specify the account to use for logging on to the new Data Warehouse instance by providing the information as you specified in [Step 3](#). Specify a valid name, in format *ServerName/Instance*, for the Reporting Services instance and click **Next**.
- 10 In the Results Summary dialog box, click **Finish** to exit the Data Migration Utility.
- 11 Launch the Analysis Center 3.0 or later Admin Console and enable all the Data Sources.
- 12 After the first successful completion of the ETL processing jobs for all Data Sources, enable the OLAP processing job. After the first successful completion of the OLAP processing job, you can begin generating reports.

7.7 Deploying Reports After Data Migration

After migrating Analysis Center 2.9 or later data to Analysis Center 3.2, update the default reporting server location to deploy reports.

To obtain the URL of the SQL Server Reporting Services server and update the URL in Reporting Console:

- 1 Open the Reporting Services Configuration Manager.
- 2 Connect to the report server instance where SQL Server Reporting Services is located. In the Reporting Services Configuration Connection dialog box, specify the server name and report server instance and click **Connect**.
- 3 In the Reporting Services Configuration Manager window, click **Web Service URL** in the left pane.
- 4 Copy the URL from **Report Server Web Service URLs** option.
- 5 Open the Reporting Console and click **Global Tasks > Configure Reporting Services**.
- 6 In the Default Report Server Location box, paste the URL of the reporting server and click **OK**.

8 Performing Administrative Tasks

NetIQ Analysis Center Admin Console (Admin Console) allows you to perform tasks associated with the administration of Analysis Center. To launch Admin Console on a computer, locate the `NetIQ` folder in the `Start` menu of the computer and click **Analysis Center > Admin Console**.

- ♦ [Section 8.1, “Configuring Data Source,” on page 53](#)
- ♦ [Section 8.2, “Managing Data,” on page 63](#)
- ♦ [Section 8.3, “Processing Data Task,” on page 65](#)
- ♦ [Section 8.4, “Migrating the Reports to Reporting Center,” on page 65](#)
- ♦ [Section 8.5, “Restricting the ETL Transaction Logs,” on page 65](#)

8.1 Configuring Data Source

To manage Data Sources, view jobs, or modify ETL filters, click the **Configuration** tab in the left panel of the Admin Console. For more information about configuring data, review the following sections:

- ♦ [Section 8.1.1, “Managing Data Sources,” on page 53](#)
- ♦ [Section 8.1.2, “Managing Jobs,” on page 61](#)
- ♦ [Section 8.1.3, “Understanding ETL Filters,” on page 61](#)

8.1.1 Managing Data Sources

A Data Source refers to a single AppManager repository, the related Data Mart database, and the connections to these servers and databases. Before you generate an AppManager report, you must identify the following:

- ♦ Each AppManager repository from which you want data. At any point of time, an AppManager repository can be identified only once.
- ♦ SQL Server for each AppManager repository.
- ♦ SQL Server or the SQL Server failover cluster for each related Data Mart database.
- ♦ Name for each Data Mart database.
- ♦ Connection information to these servers and databases.

For more information about how to manage Data Sources, review the following sections:

- ♦ [“Planning a New Data Source” on page 54](#)
- ♦ [“Adding a Data Source” on page 55](#)
- ♦ [“Understanding the Data Source View” on page 58](#)
- ♦ [“Changing Data Source Properties” on page 58](#)
- ♦ [“Enabling and Disabling a Data Source” on page 60](#)
- ♦ [“Deleting a Data Source” on page 60](#)

Planning a New Data Source

When you add a Data Source on a SQL Server, a Data Mart is created on that server. Before you add a new Data Source, you must determine the following information about the SQL Server on which you want to create the Data Mart:

- ♦ Is the SQL Server in a cluster or a non-cluster environment?
- ♦ Does the SQL Server use named instances or the default instance?

This information helps you to accordingly modify the `MsDtsSrvr.ini.xml` file in order to successfully create the Data Source. The `MsDtsSrvr.ini.xml` file is located in the `DTS\Binn` folder of the SQL Server installation folder. For example:

- ♦ **On a SQL Server 2005 computer:** The `MsDtsSrvr.ini.xml` file is located in `SQL_Server_installation_folder\90\DTS\Binn` folder.
- ♦ **On a SQL Server 2008 R2 computer:** The `MsDtsSrvr.ini.xml` file is located in `SQL_Server_installation_folder\100\DTS\Binn` folder.

NOTE: Ensure that the collation settings for Data Mart SQL Servers and the Corresponding AppManager Repository SQL Servers match.

Before creating a Data Mart, review the following sections:

- ♦ [“Creating Data Marts in a Non-Cluster Environment” on page 54](#)
- ♦ [“Creating Data Marts in a Cluster Environment” on page 55](#)

Creating Data Marts in a Non-Cluster Environment

If the default instance of SQL Server is not found on the Data Mart SQL Server, perform the following steps to create a single Data Mart or multiple Data Marts:

- 1 On the SQL Server, locate the `MsDtsSrvr.ini.xml` file and open it in an editor.
- 2 (Conditional) To create a single Data Mart on an instance of the Data Mart SQL Server, specify the `servername\instance` within the `<ServerName>...</ServerName>` tags as follows:

```
<ServerName>servername\instance</ServerName>
```

where *instance* refers to the server instance name on which the Data Mart is created.
- 3 (Conditional) To create multiple Data Marts on different instances of the Data Mart SQL Server, copy the following lines in the `MsDtsSrvr.ini.xml` file and specify the corresponding values for the *Folder_name* and *servername\instance* variables for every Data Mart you want to create:

```
<Folder xsi:type="SqlServerFolder">  
  <Name>Folder_name</Name>  
  <ServerName>servername\instance</ServerName>  
</Folder>
```

where *Folder_name* refers to the SSIS packages folder and *instance* refers to the instance on which you are going to create the Data Mart.

- 4 Restart the SQL Server Integration Services.

Creating Data Marts in a Cluster Environment

Perform the following steps to create a single Data Mart or multiple Data Marts:

- 1 Install the SQL Server Integration Services.
- 2 On the SQL Server, locate the `MsDtsSrvr.ini.xml` file and open it in an editor.
- 3 (Conditional) To create a single Data Mart on an instance of the Data Mart SQL Server:
 - 3a (Conditional) If the Data Mart Virtual SQL Server is a named instance, then specify the *servernameinstance* within the `<ServerName>...</ServerName>` tags as follows:

```
<ServerName>virtual_sql_server\instance</ServerName>
```

where *instance* refers to the server instance name on which the Data Mart is created.
 - 3b (Conditional) If the Data Mart Virtual SQL Server is a default instance, then specify the *instance name* within the `<ServerName>...</ServerName>` tags as follows:

```
<ServerName>virtual_sql_server</ServerName>
```
- 4 (Conditional) To create multiple Data Marts on different instances of the Data Mart SQL Server:
 - 4a Copy the following lines in the `MsDtsSrvr.ini.xml` file and specify the corresponding values for the *Folder_name* and *servernameinstance* variables for every Data Mart you want to create:

```
<Folder xsi:type="SqlServerFolder">
  <Name>Folder_name</Name>
  <ServerName>servername\instance</ServerName>
</Folder>
```

where *Folder_name* refers to the SSIS packages folder and *instance* refers to the instance on which you are going to create the Data Mart.
 - 4b (Conditional) If the Data Mart Virtual SQL Server is a named instance, then specify the *servernameinstance* within the `<ServerName>...</ServerName>` tags as follows:

```
<ServerName>virtual_sql_server\instance</ServerName>
```

where *instance* refers to the server instance name on which the Data Mart is created.
 - 4c (Conditional) If the Data Mart Virtual SQL Server is a default instance, then specify the *instance name* within the `<ServerName>...</ServerName>` tags as follows:

```
<ServerName>virtual_sql_server</ServerName>
```
- 5 Restart the SQL Server Integration Services.

Adding a Data Source

You can add a Data Source for an AppManager repository (application database) that uses the default or a named instance.

The time taken to create a Data Source varies depending on factors such as system resources, network connections, and the amount of data being processed. The process of creating a Data Source involves the following:

1. Creating the related Data Mart database, the ETL job, the related cube in the Data Warehouse.
2. Running the ETL job.
3. Processing the cube.

When the data is being processed, the status of Data Source in the **Data Source View** is displayed as **Pending**. After the data processing is complete, the status of Data Source changes to **Success**.

NOTE: You cannot run reports against a Data Source until the associated cube is created, the ETL and OLAP Processing jobs have completed, and the data is available in the cube. Errors are displayed when you run a report in the following scenarios:

- ♦ **Before the cube is created:** An error message that the cube does not exist or is not processed is displayed.
 - ♦ **Before data is available in the cube:** An error message that no data is found for this report is displayed.
-

To add a Data Source:

- 1 Launch the Admin Console.
- 2 In the left navigation pane, click **Configuration > Data Source View** and click **Add** in the top Navigation pane.
- 3 In the Application Data dialog, specify the following:
 - ♦ **Application:** Displays the application name, AppManager, from which you want to import data.
 - ♦ **Application data server:** Specify the name of the SQL Server used for the application database, which is the AppManager repository.
 - ♦ **Database name:** Specify the name of the application database.
 - ♦ **Authentication:** Select the authentication method for the Data Mart SQL Sever Agent to connect to the application database:
 - ♦ **Use Windows authentication:** Select this option to enable the Data Mart SQL Server Agent to connect to the AppManager repository SQL Server using Windows authentication. In this case, the SQL Server Agent service account is used.
 - ♦ **Use SQL Server authentication:** Select this option to enable the Data Mart SQL Server Agent to connect to the AppManager repository SQL Server using a SQL account and specify the **Login Name** and **Password**.
 - ♦ **Initial load date:** Select the month and year starting which you want to extract data from the application database. For example, if you select January 2013, then all data from January 2013 onwards is extracted from the AppManager repository.
- 4 Click **Next** and provide the following information:
 - ♦ **Data Mart SQL Server:** Specify the name of the SQL Server that you want to use for the Data Mart database. Depending on whether the specified SQL Server is in a cluster or a non-cluster environment and it uses named instances or default instance, you must accordingly modify the `MsDtsSrvr.ini.xml` file. For more information, see [“Planning a New Data Source” on page 54](#).

Also, ensure that SQL Server Integration Services is installed and running on this Data Mart SQL Server.
 - ♦ **Database name:** Specify a new name for the Data Mart database or retain the default specified name.
 - ♦ **Authentication:** Select the authentication method for the Data Warehouse SQL Sever Agent to connect to the Data Mart SQL Server:
 - ♦ **Use Windows authentication:** Select this option to have the Data Warehouse SQL Server Agent connect to the Data Mart SQL Server using Windows authentication. In this case, the SQL Server Agent service account is used.
 - ♦ **Use SQL Server authentication:** Select this option to have the Data Warehouse SQL Server Agent connect to the Data Mart SQL Server using a SQL account and specify the **Login Name** and **Password**.

- ♦ **Default database file location:** Select this option to accept the default file location or deselect this option to specify the Data Mart data file location in the format: *drive:\path*.
You must ensure that the Data Mart data file path already exists. Do not include the name of the data file in this file path. If you specify a non-existing file path, then adding of Data Source fails because Data Mart is not created for this Data Source.
- ♦ **Database initial size:** Specify the initial size, in MB, for the Data Mart data file. The default size is 10 MB. You can modify this value only if you have not selected the **Default database file location** option.
- ♦ **Default database log file location:** Select this option to accept the default log file location or deselect this option to specify the Data Mart log file path in the format: *drive:\path*.
You must ensure that the Data Mart log file path already exists. Do not include the name of the log file in this file path. If you specify a non-existing file path, then adding of Data Source fails because Data Mart is not created for this Data Source.
- ♦ **Log initial size:** Specify the initial size, in MB, for the log file. The default size is 1 MB. You can modify this value only if you have not selected the **Default database log file location** option.
- ♦ **Daily aggregate after:** Select the age, in months, at which data should be aggregated daily in the Data Mart. Daily aggregation provides less granularity than the actual raw data, but requires less storage space. In daily aggregation, data generated during the same 24-hour time period is compressed to two rows of data in the Data Mart: one for the local time zone and another for the UTC time zone.
- ♦ **Hourly aggregate after:** Select the age, in months, at which data should be aggregated hourly in the Data Mart. Hourly aggregation provides less granularity than the actual raw data, but requires less storage space (although more than daily aggregation). In hourly aggregation, data generated during the same one-hour time period is compressed to one row of data in the Data Mart.

5 Click **Next** and provide the following information:

- ♦ **Enter a name to identify this Data Source or accept the default name:** Specify a name for the Data Source or retain the default specified name. This is the name Analysis Center uses to identify the Data Source.
- ♦ **Delete data after:** Specify the number of months for which you want to store AppManager data in Analysis Center. Data older than what you specify is deleted from Analysis Center.
- ♦ **Schedule:** Select the schedule to transfer data from the application database. For example, if you select **Every 59 minutes**, then data is transferred every 59 minutes from the AppManager repository.

6 Click **Next** and configure the following options:

- ♦ Select one of the following pre-check modes:
 - ♦ **No check:** Select this option if you do not want to verify the information you specified in the previous wizard pages.
 - ♦ **Basic:** Select this option to verify the SQL Server connections and also verify whether the Data Mart can be created.

To manually run pre-check on a Data Source, click the Data Source and click **Run Pre-check** in the top navigation pane.

- ♦ **Activate Data Source automatically once all pre-check steps passed:** Select this option to automatically activate the Data Source after the **Basic** pre-checks mode is completed. If you do not select this option, the status of the Data Source that you add is displayed as **Pending** in the **Data Source View**. To manually activate the Data Source, right-click the Data Source and click **Activate**.

Understanding the Data Source View

To display the Data Source view, click **Configuration > Data Source View** in the left navigation pane of the Admin Console.

The **Data Source View** displays the following information. In the user interface, you can drag a column header above the view to group the information by that column:

Column Name	Description
Status	Displays the status of the Data Source. For example, the status is Success if the Data Source is available to provide data for reports.
Name	Displays the name of the Data Source.
Enabled	Indicates whether the Data Source is enabled or not.
Message	Displays a message relevant to the Data Source. For example: Pending Data Source means the Data Source is still processed.
DM Server	Displays the SQL Server name for the Data Mart database.
DM Database	Displays the name of the Data Mart database.
DS Server	Displays the SQL Server name for the AppManager repository.
DS Database	Displays the name of the AppManager repository database.
Updated Time	Displays the last updated time for the Data Source operation. For example: <ul style="list-style-type: none">♦ The time at which the last attempt to create a Data Source either succeeded or failed.♦ The last time the properties of a Data Source were changed.♦ The last time the ETL job ran.
Oldest Data	Displays the date of the oldest data copied from the AppManager repository.
Newest Data	Displays the date of the most recent data copied from the AppManager repository.
Days Collected	Displays the number of days of data copied from the AppManager repository.

Changing Data Source Properties

To change the Data Source properties such as enable or disable Data Source, edit the schedule to transfer data from the application database, and edit the number of months of data to store in the Data Mart:

- 1 Launch the Admin Console.
- 2 In the left navigation pane, click **Configuration > Data Source View**.
- 3 In the Data Sources list, do one of the following:
 - ♦ Right-click the Data Source for which you want to change the properties and click **Properties**.
 - ♦ Click the Data Source for which you want to change the properties and click **Properties** in the top navigation pane.

- 4 In the Data Source Properties dialog, click the **General** tab to set the following properties:
 - ♦ **Name:** Displays the name of the Data Source. You cannot edit this option.
 - ♦ **Set as an enabled Data Source:** Displays whether the Data Source is enabled or not. If the option is selected, the Data Source is already enabled. Toggle the selection to accordingly enable or disable the Data Source.
 - ♦ **Application:** Displays the name of application, AppManager, from which data is copied. You cannot edit this option.
 - ♦ **Initial load date:** Displays the date starting which the data was loaded from the application database. You cannot edit this option.
 - ♦ **Schedule:** Displays the specified schedule to transfer data from the application database. To edit the schedule, select **Change to** and then select a schedule.
 - ♦ **Delete data after:** Displays the number of months of data, including the current month, to store in the Data Mart.
- 5 Click the **Application Data** tab to set the following properties:
 - ♦ **Application data server:** Specify the name of the SQL Server used for the AppManager repository.
 - ♦ **Database name:** Specify the name of the AppManager repository.
 - ♦ **Authentication:** Select the authentication method for the Data Mart SQL Sever Agent to connect to the AppManager repository SQL Server:
 - ♦ **Use Windows authentication:** Select this option to have the Data Mart SQL Server Agent connect to the AppManager repository SQL Server using Windows authentication. In this case, the SQL Server Agent service account is used.
 - ♦ **Use SQL Server authentication:** Select this option to have the Data Mart SQL Server Agent connect to the AppManager repository SQL Server using a SQL account and specify the **Login Name** and **Password**.
- 6 Click the **Data Mart** tab to set the following properties:
 - ♦ **Data Mart SQL Server:** Displays the name of the SQL Server used for the Data Mart database. You cannot edit this option.
 - ♦ **Database name:** Displays the name of the Data Mart database. You cannot edit this option.
 - ♦ **Authentication:** Select the authentication method for the Data Warehouse SQL Sever Agent to connect to the Data Mart SQL Server:
 - ♦ **Use Windows authentication:** Select this option to have the Data Warehouse SQL Server Agent connect to the Data Mart SQL Server using Windows authentication. In this case, the SQL Server Agent service account is used.
 - ♦ **Use SQL Server authentication:** Select this option to have the Data Warehouse SQL Server Agent connect to the Data Mart SQL Server using a SQL account and specify the **Login Name** and **Password**.
 - ♦ **Default database file location:** Displays the Data Mart data file location in the format: *drive:\path*. You cannot edit this option.
 - ♦ **Database initial size:** Displays the initial size, in MB, for the Data Mart data file. You cannot edit this option.
 - ♦ **Default database log file location:** Displays the Data Mart log file path in the format: *drive:\path*. You cannot edit this option.
 - ♦ **Log initial size:** Displays the initial size, in MB, for the log file. You cannot edit this option.
 - ♦ **Daily aggregate after:** Displays the age, in months, at which data should be aggregated daily in the Data Mart. To modify the age, select a new value.

Daily aggregation provides less granularity than the actual raw data, but requires less storage space. In daily aggregation, data generated during the same 24-hour time period is compressed to two rows of data in the Data Mart: one for the local time zone and another for the UTC time zone.

- ♦ **Hourly aggregate after:** Select the age, in months, at which data should be aggregated hourly in the Data Mart. To modify the age, select a new value.

Hourly aggregation provides less granularity than the actual raw data, but requires less storage space (although more than daily aggregation). In hourly aggregation, data generated during the same one-hour time period is compressed to one row of data in the Data Mart.

7 Click **OK**.

Enabling and Disabling a Data Source

- 1 Launch the Admin Console.
- 2 In the left navigation pane, click **Configuration > Data Source View**.
- 3 (Conditional) To enable the Data Source, right-click the Data Source and click **Enable**.
- 4 (Conditional) To disable the Data Source, right-click the Data Source and click **Disable**.

When you disable a Data Source, you can still create reports for data collected up to the time the last ETL job ran for that Data Source. After a Data Source is disabled, the related ETL job no longer runs and data is no longer copied from the AppManager database to the Data Warehouse.

Deleting a Data Source

- 1 Launch the Admin Console.
- 2 In the left navigation pane, click **Configuration > Data Source View**.
- 3 Right-click the Data Source and click **Delete**.
- 4 (Conditional) To remove the associated Data Mart databases, click **Yes**.

If you do not choose to delete the Data Mart database associated with the Data Source, you can later use the SQL Server Enterprise Manager to delete the database.

Deleting a Data Source performs the following actions:

1. Displays the status of Data Source as **Pending Delete** in the **Data Source View**.
2. Creates and executes the *Data_Source_Name* Create Data Source Data Marts job to disable both the Data Source and the *Data_Source_Name* ETL job on the Data Mart database SQL Server.
3. Initiates the Analysis Center (OLAP Processing) job as per the schedule to perform the following actions:
 - ♦ Removes the physical and regular cubes for the Data Source from the AC_OLAP database.
 - ♦ Deletes the Data Source ETL job on the Data Mart SQL Server.
 - ♦ Deletes the SSIS packages of the ETL job on the Data Mart SQL Server.
 - ♦ Deletes the Data Mart database if you chose to remove it.
 - ♦ Redefines the virtual cubes so that the physical and regular cubes for the Data Source are no longer included.
 - ♦ Marks the Data Source as **Deleted**, although it still exists in the database.

NOTE: If no ETL jobs have run against the Data Source, then the Data Source was not fully loaded into the OLAP Data Source dimension. As a result, the OLAP Processing job completely removes the Data Source.

8.1.2 Managing Jobs

- 1 Launch the Admin Console.
- 2 In the left navigation pane, click **Configuration > Jobs View**.

The **Jobs View** displays the following information. In the user interface, you can drag a column header above the view to group the information by that column:

Column	Description
Status	Displays the job status such as success and failure.
Job Name	Displays the name of the SQL Server Agent job.
Data Source Name	Displays the name of the Data Source.
Message	Displays a short description of the SQL Server Agent job.
Run Time	Displays the last date and time when the job ran.
Elapsed Time	Displays the duration of the last job run.

You can do the following:

- ♦ To start, stop, enable, or disable a job, right-click the job and select the appropriate option.
- ♦ To view the detailed log information of the job, select the job and click **Detail Log**. If a job fails, you can use this log information to find out more details about the job failure.
- ♦ To view the detailed log information about a job step, select the step and click **Step Detail Log**.

8.1.3 Understanding ETL Filters

ETL filters let you control the amount of data that Analysis Center collects from AppManager. For example, if the AppManager repository contains a large amount of data, you can define a filter to specify which data to include or exclude from the Analysis Center report. To troubleshoot issues when Analysis Center does not display data that you expect to see, verify if any filters are applied on that data.

You can view or modify existing ETL filters and also define new filters. To disable filters, select the filters and click **Disable ETL Filters** in the top navigation pane. You cannot enable a disabled filter and must recreate it. To display the disabled filters, select the **Display disabled ETL filters** option. The disabled filters are highlighted in grey.

Review the following sections:

- ♦ [“Understanding ETL Filter Limitations” on page 62](#)
- ♦ [“Defining New Filters” on page 62](#)

Understanding ETL Filter Limitations

- ♦ When you apply an ETL filter, it only affects the new data. Existing data already processed in Analysis Center is not affected. To apply the filter to the existing data, you must redeploy the job in AppManager. Before redeploying a job, you must ensure that Analysis Center stops processing that data until the job is complete.
- ♦ When you remove an ETL filter, Analysis Center begins processing the data, which it was previously filtering, on the next ETL run. It does not process data prior to when the filter was applied.

Defining New Filters

Analysis Center provides two predefined ETL filters. If you define and save a new filter, Analysis Center applies this new filter when the ETL process runs successfully the next time.

To add a new filter:

- 1 Launch the Admin Console.
- 2 In the left navigation pane, click **Configuration > ETL Filters**.
- 3 Click **New Filter** to create a new filter entry in the list and do the following:
 - 3a In the **Data Source** option, select the Data Source on which you want to apply the filter.
 - 3b In the **Object Type** option, select the type of object on which you want to apply the filter.

To create a filter for UNIX, NT, or AppManager, select the **Object Type** as Knowledge Script and select the Knowledge Script filter accordingly. For example:

 - ♦ For UNIX Knowledge Script, the filter is **UNIX%**.
 - ♦ For NT Knowledge Script, the filter is **NT%**.
 - 3c In the **Object Name** option, specify the name of the object.

Following are some of the examples of object names based on the selected object type:

 - ♦ **Application:** NT, SQL, IIS
 - ♦ **Knowledge Script:** NT_CpuByProcess, SQL_MemUtil, IIS_CpuHigh
 - ♦ **Server:** AGENT1, SQLINSTANCE, DELL_MACHINE

To enable the filter to use the object name as a wildcard, use the percent sign (%) in the name and set the **Object Wildcard** option as **Yes**.
 - 3d In the **Object Wildcard** option, select one of the following to specify whether the filter should treat the object name as a wildcard or not:
 - ♦ **Yes:** The filter treats the object name as a wildcard and filters any object that contains the text specified in **Object Name** option. However, the object name you specified in **Object Name** option must contain the percentage sign (%) wildcard character.
 - ♦ **No:** The filter does not treat the object name as a wildcard and filters any object that contains the exact text specified in **Object Name** option.
 - 3e In the **Filter Flag** option, select one of the following:
 - ♦ **INCLUDE:** The data from the specified object should be included in the data load.
 - ♦ **EXCLUDE:** The data from the specified object should be excluded from the data load.
 - ♦ **LEGEND:** The data from the specified object should be processed as a static legend even if the metric carries a dynamic legend.
 - 3f Click **Save**.

8.2 Managing Data

The following sections provide information about how to clean up data, rename or delete metrics, and delete machines. Before you do the following you must disable all the ETL and OLAP jobs.

- ♦ [Section 8.2.1, “Delete Machines Task,” on page 63](#)
- ♦ [Section 8.2.2, “Delete Metrics Task,” on page 63](#)
- ♦ [Section 8.2.3, “Data Cleanup Task,” on page 64](#)
- ♦ [Section 8.2.4, “Rename Metrics Task,” on page 64](#)

8.2.1 Delete Machines Task

The Delete Machines task lets you remove servers and devices from Analysis Center when you no longer want to report on them. This task removes the servers and corresponding data points from the Data Warehouse and Data Mart databases for these machines in Analysis Center. This does not prevent Analysis Center from collecting data points from the same machines again.

To remove the machines that you do not want to include in reports:

- 1 Launch the Admin Console.
- 2 In the left navigation pane, click **Data Management > Delete Machines**.
- 3 Select the machines you want to delete and follow the on-screen prompts.

After the specified machines and data points are deleted, Analysis Center reprocesses machine dimensions and partitions, and does not display these machines in the Analysis Center reports. Deleted machines are not displayed in the **Deleted Machines** folder in the Console. To view a deployed report without the specified machines in SSRS, redeploy the report.

8.2.2 Delete Metrics Task

The Delete Metrics task allows you to remove specified metrics that you do not want to include in the report or that were collected unintentionally. It is especially helpful when you have an obsolete metric, collected the wrong metric, or specified an incorrect metric such as "C: " instead of "C:\ ". The Delete Metrics task removes the existing metrics, but does not prevent Analysis Center from collecting the same metrics again.

To remove the metrics that you do not want to include in reports:

- 1 Launch the Admin Console.
- 2 In the left navigation pane, click **Data Management > Delete Metrics**.
- 3 Select the metrics you want to delete and follow the on-screen prompts.

Ensure that you do not remove metrics that are currently in your reports. When you delete a live metric, Analysis Center stops collecting data for it, which results in broken links and missing data in your Analysis Center reports.

To begin collecting data again for a live metric that you deleted by mistake, run a new Knowledge Script job in AppManager to regenerate the deleted metric. Then, reconfigure all reports that reference the deleted metric. However, the new Knowledge Script job does not retrieve data that Analysis Center would have collected during the period when the links were broken.

After the specified metrics are deleted, Analysis Center reprocesses metric dimensions and partitions, and does not display these metrics in the Analysis Center reports. To view a deployed report without the specified metrics in SSRS, redeploy the report.

8.2.3 Data Cleanup Task

The Data Cleanup task is helpful if Analysis Center has already collected a range of data that you do not need. The ETL Filter task prevents Analysis Center from collecting specific data, but the Data Cleanup task removes the existing data. The Data Cleanup task does not prevent Analysis Center from collecting the same data again.

You can also use this task to remove data points only for specific machines or Knowledge Scripts. If you do not want data from the previous year in your reports, you can remove data points collected from all machines and Knowledge Scripts before that specific date.

To remove data collected for machines or Knowledge Scripts in a particular UTC time frame:

- 1 Launch the Admin Console.
- 2 In the left navigation pane, click **Data Management > Data Cleanup**.
- 3 Select one or more criteria and follow the on-screen prompts.

If you do not specify a machine or Knowledge Script, Analysis Center removes data collected for all machines and Knowledge Scripts. If you do not specify a time frame, Analysis Center removes data right from data inception time until now.

After the data points are removed, Analysis Center re-creates partitions based on the currently available data and does not display those data points in Analysis Center reports.

8.2.4 Rename Metrics Task

The Rename Metrics task allows you to modify the names of metrics specified in reports. Analysis Center continues to use the original metric name internally. This task is helpful when you want to include a more business-oriented and less technical metric name in your reports. You can also rename the metric if the Knowledge Script writes a metric incorrectly, or if the metric name changes over time and you want to publish just one name.

To modify the names of specified metrics:

- 1 Launch the Admin Console.
- 2 In the left navigation pane, click **Data Management > Rename Metrics**.

The **Metric** column displays the metric type and the original internal names of the parent and child metrics. The **Edit Metric** column displays the new alias as the Analysis Center report displays it.
- 3 In the **Edit Metrics** column, select the metrics you want to rename and specify the new name.

You can rename multiple metrics at the same time. For example, you can add a parent metric name to each child metric you select or add the same prefix to multiple metrics.
- 4 Click **Apply Changes**.
- 5 (Conditional) To revert the metric name, right-click the metric and click **Restore Default**.

After you rename a metric, Analysis Center processes only the metric dimensions, and does not process the OLAP database. To view a deployed report with the renamed metric in SSRS, redeploy the report.

Certain predefined reports delivered with Analysis Center and AppManager Report Packs for Analysis Center, such as SystemUptime, VoIP, Exchange 2007, Virtual Center, and custom reports, contain specific metric names built into the metric selection filter of the report itself. If you rename one of these metrics, they might no longer be available in the metric context selector of the predefined

report or the report might no longer return data for the selected metric names. To fix the broken reports, reset the metric name to its default name. If you are unsure about a specific report, please contact [NetIQ Technical Support](#).

8.3 Processing Data Task

The Cube Processing task lets you to reprocess the OLAP partitions when you want to optimize Analysis Center performance, fix corrupted OLAP database files, or view older data that Analysis Center might not load automatically. You can select OLAP databases and partitions by specified time ranges, and choose the number of partitions to process at a time. In addition, you can choose to display UTC partitions separately. However, you cannot process partitions until you have disabled all the ETL and OLAP jobs.

8.4 Migrating the Reports to Reporting Center

After installing or upgrading to Analysis Center 3.2, you can use the Report Migration utility to migrate the Analysis Center 2.9 reports to the Reporting Center Server. To open the Report Migration utility, click **Main > Migration** from the Admin Console.

The Report Migration utility provides two options from which the reports can be migrated to the specified Reporting Center Server:

- ♦ **Warehouse:** Select this option to migrate the reports from the warehouse after you have upgraded from Analysis Center 2.9 to Analysis Center 3.2. You need to select the reports from the reports list to migrate.

NOTE: This option is disabled if a fresh installation of Analysis Center 3.2 is performed.

- ♦ **XML:** Select this option if you want to migrate the reports that have been exported from an Analysis Center 2.9 setup. This option can also be used in a fresh Analysis Center 3.2 setup. Browse the folder where the exported Analysis Center 2.9 reports are available and then select the reports from the reports list.

IMPORTANT: Before exporting the reports from an Analysis Center 2.9 setup, you must apply the [Hotfix 7015655](#) on the setup to retain the metric context set for these reports. If you have already applied the [Hotfix 2.9.0.3](#) on the setup, you do not need to apply the [Hotfix 7015655](#).

During report migration, you must select either Windows or SQL Authentication to connect to the Reporting Center database. If you use Windows Authentication, the Analysis Center account that you are logged in must belong to the System Administrators group for the SQL Server. This account must have access to the Reporting Center. If you use SQL Authentication, you must specify a SQL Server account that belongs to the System Administrators group for the SQL Server of Reporting Center.

8.5 Restricting the ETL Transaction Logs

The ETL job is the process by which data is extracted from an AppManager repository, transformed to a format appropriate to the Data Warehouse, and then loaded into the Data Warehouse.

When you run ETL jobs, the transaction logs are being generated and keep on increasing in size in each ETL cycle, which might lead to the ETL jobs failure.

To prevent this failure, you can restrict the logs from being generated by executing the following query in the SQL Server Query Analyzer against the corresponding Data Mart database:

```
EXEC dbo.SetsetValue 'RestrictTransactionLog','TRUE',1
```

If you want to remove the above restriction on the ETL transaction logs, execute the following query:

```
EXEC dbo.SetsetValue 'RestrictTransactionLog','FALSE',1
```

9 Configuring Reporting Center Security

Reporting Center security defines what is visible to each user and determines what each user is allowed to do. Reporting Center saves all security settings in the Configuration Database.

- ♦ [Section 9.1, “Understanding Reporting Center Security,” on page 67](#)
- ♦ [Section 9.2, “Assigning Security to Objects,” on page 69](#)
- ♦ [Section 9.3, “Applying Security,” on page 70](#)

9.1 Understanding Reporting Center Security

Configuring security in Reporting Center means restricting or allowing users access to objects on the Navigation Tree, including folders, reports, dashboards, templates, and data source connections. You configure security settings in the Manage Security window, which you can access from the Global Tasks ribbon, the main home page, or the Tasks pane.

When you configure security, you can define the following:

- ♦ **Users:** Individual user accounts. Administrators create an account for every user and determine user access to the Reporting Console. Reporting Center allows administrators to import user accounts from Windows Active Directory.
- ♦ **User Groups:** Collections of user accounts. Every user must be a member of at least one group, and groups can be members of other groups. Reporting Center allows administrators to create new Reporting Center groups or import Windows Active Directory groups.
- ♦ **Permission Sets:** Definitions specifying the level of access for groups to data source connections, folders, reports, and dashboards.

Configuring security includes the following types of tasks:

- ♦ Enabling and disabling users, granting Reporting Center administrative permissions to individual users, and adding Windows users to Reporting Center.
- ♦ Creating groups of Reporting Center users, granting administrative permissions to specific groups, and adding Windows users to Reporting Center groups.
- ♦ Creating and enabling permission sets that grant or deny access to specific objects or tasks in Reporting Center.

9.1.1 Understanding Users and User Groups

You configure your security model by defining users, adding users to user groups, and assigning a group and a permission set to each object in the Navigation pane. You can create users, user groups, and permission sets in any order.

The primary purpose of creating a user in Reporting Center is to assign it to a group. Administrators can grant users administrative privileges, but they cannot associate permission sets with users by themselves. After installation, only the installing account has access to Reporting Center as a member of the predefined Administrators group.

Reporting Center provides the following predefined user groups that you cannot delete.




- ♦ **Reporting Center Administrators:** Grants full, administrative permissions in Reporting Center. By default, Reporting Center adds the installing account to this group. In Reporting Center, to have administrative permissions, a user account must be a member of Reporting Center Administrators or a member of a group that is a member of it. Having administrative privileges outside of Reporting Center is not sufficient.
- ♦ **Reporting Center Users:** Allows administrators to grant limited, non-administrative permissions in Reporting Center. By default, this group contains no members and has no permissions defined.

When you design your security model, take advantage of the flexibility that Reporting Center provides by importing groups and by adding groups as members of other groups. For example, you can import a complete Windows Active Directory group and grant the group access to a specific report. You can also configure that imported Active Directory group to be a member of another group, and at the top level grant the group access to relevant reports.

9.1.2 Understanding Permission Sets

Defining permission sets allows you to enforce more granular security for each object in Reporting Center. You can allow or restrict access to every task users can do. For example, one group can have permission to create and delete reports, and another group can have permission to only view reports. You decide what users can do depending on what users need to effectively do their jobs, and how you want to configure your environment.

When you configure permission sets, choose from the following three states.

	Granted: Users have access to the object with this permission or are allowed to do the specified task (such as modifying reports or creating folders).
	Denied: Users cannot access the object with this permission or are not allowed to do the specified task. When a user logs in, Reporting Center does not display the restricted objects.
	Not Granted: The specified task does not have any defined permissions. Users can view these objects (as long as the View a Node permission is granted), but cannot perform the tasks.

Reporting Center provides a number of predefined permission sets that you can either customize to create new permission sets, or use as provided. These permission sets allow various levels of access to data source connections, folders, reports, and dashboards in the Navigation Tree. The following table lists the predefined permission sets, along with the access they allow or restrict. If you customize one of these permission sets, you can allow or restrict access to each individual task, such as creating folders, exporting reports, and so on.

If you modify the predefined permission sets, NetIQ Corporation recommends that you do not change their names. If you upgrade Reporting Center in the future, Reporting Center reinstalls them with the original names.

NOTE: To ensure that a node is visible, you must include the **View a Node** permission in the permission set. Otherwise, it is possible for a group to have permissions to manipulate a node that is not displayed. Permission to run a report is included in the **View a Node** permission.

Category	Permission
Administration	Assign security rules to a Node
Folder	Create a Folder Delete a Folder Move a Folder Rename a Folder
Node	View a Node
Report	Create a Report Delete a Report Deploy a Report Export a Report Move a Report Print a Report Rename a Report Save a copy of Report Save a Report

9.2 Assigning Security to Objects

After you have set up users, user groups, and permission sets, the next step is to apply security to the objects on the Navigation Tree. When you configure security for these objects, you choose a user group and a permission set and associate them with the specified object. These security settings determine what users are allowed to do in Reporting Center. You can apply security to every object except **Reporting Center Home**, which is the root object on the Navigation Tree.

For objects in a hierarchy, Reporting Center uses the most restrictive permissions and applies them to the subfolders and objects. If you have not configured security for a particular object, that object inherits the permissions of its immediate parent. When you log in to Reporting Center, it displays only the objects that the group has permission to view.

For example: Consider a scenario in which a group has permission to view the default **Reports** folder and the folder for Application A, but does not have permission to view the folder for Application B. In this case, the group has access to the reports for Application A, but does not have access to the reports for Application B. The Reporting Console does not display the Application B folder when users from that group log in.

9.2.1 Tips for Planning Your Security Model

As you plan your security model, consider the following recommendations:

- ♦ Arrange your groups hierarchically. Take advantage of the ability to add groups as members of other groups. In this way, you can arrange the groups correctly and then assign permission at the top level.

For example, suppose you have a shared environment running NetIQ Aegis, NetIQ Directory and Resource Administrator (DRA), and NetIQ Analysis Center. For each application, you can create **bucket** groups containing other groups that can only access the reports and dashboards for those applications. Rather than assign permissions for each member group, you would assign permissions at the top-most level.

- ♦ Use the Reporting Center user groups you create or the Windows Active Directory groups you import to manage the different permission levels of different folders, reports, and data source connections. For example, an Aegis group would only have access to the Aegis nodes and connections on the Navigation Tree, a DRA group would only have access to DRA reports and connections, and so on.
- ♦ Organize your security model before you implement it by creating user accounts, user groups, and permission sets, and keeping them disabled until you are ready to apply security.
- ♦ In the ongoing administration of Reporting Center Security, modify your security model to adapt to the needs of your company so that users only have access to the reports and data source connections relevant to them.
- ♦ For a user account to view objects on the Navigation Tree when the user logs on to Reporting Center, the account must be a member of a group associated with a permission sets. Otherwise, the Navigation Tree is blank.

9.3 Applying Security

You can add multiple users to a user group and multiple groups to other groups. You can also add the same group multiple times with different permissions. In this case, if there are overlapping permissions (for example, two different permission sets that both assign permissions to reports), the most restrictive permission set takes precedence.

To apply security to a node on the Navigation Tree:

- 1 (Conditional) If you are applying security to a folder or data source connection, right-click the node and click **Folder Properties > Permissions** or **Data Source Connection Properties > Permissions**.
- 2 (Conditional) If you are applying security to a report or dashboard, right-click the node and click **Report Permissions** or **Dashboard Permissions**.
- 3 Click **Add**.
- 4 In the dialog box, choose a user group and then choose a permission set. Reporting Center enforces this permission set for the group you select. You can also modify or create new permission sets.
- 5 Click **OK** twice.

A Adding Dynamic Legends to AppManager Knowledge Scripts

This chapter provides a high-level explanation of how to modify AppManager Knowledge Scripts to generate dynamic legends. To implement this solution, you should be familiar with the process of making modifications to existing Knowledge Scripts or creating new Knowledge Scripts.

For more information about customizing Knowledge Scripts, see the [AppManager documentation](#).

- ♦ [Section A.1, “What is a Dynamic Legend?,” on page 71](#)
- ♦ [Section A.2, “Why Add Dynamic Legends?,” on page 71](#)
- ♦ [Section A.3, “Sample Dynamic Legend,” on page 72](#)
- ♦ [Section A.4, “Required XML Tags,” on page 72](#)
- ♦ [Section A.5, “Adding a Dynamic Legend to a Knowledge Script,” on page 73](#)

A.1 What is a Dynamic Legend?

A dynamic legend is a block of XML text that accompanies each data stream collected by a Knowledge Script. The dynamic legend describes the data stream so that Analysis Center can accurately and uniquely identify the data to process it for inclusion in the Data Warehouse.

A dynamic legend includes:

- ♦ A static description, which appears as a member name in the second level of the Metric dimension hierarchy in the Data Warehouse.
- ♦ A dynamic description, which appears as a member name in the third level of the Metric dimension hierarchy in the Data Warehouse.

A.2 Why Add Dynamic Legends?

You want to add this capability to a Knowledge Script when:

- ♦ You have changed the legend format of an existing Knowledge Script.
- ♦ You have created a new Knowledge Script with a unique legend format.

Analysis Center can process dynamic legend data without having to rely on a legend-processing rule for each data stream collected by a Knowledge Script.

To see an example of how dynamic legends are used in an existing Knowledge Script, examine the code for the AppManager version 6.0 of NT_LogicalDiskSpace.

A.3 Sample Dynamic Legend

Below is a sample dynamic legend from the NT_LogicalDiskSpace Knowledge Script.

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

<APPMANAGER>

  <LEGENDDETAIL>

    <ORIGINKSNAME>NT_LogicalDiskSpace</ORIGINKSNAME>

    <APPLICATION>NT</APPLICATION>

    <ACTYPE>Logical Disk</ACTYPE>

    <DESCRIPTION>Logical Disk Space Available {MB}

  </DESCRIPTION>

  <OBJECTINFO>Logical Disk C:</OBJECTINFO>

    <OBJECTNAME>NT_LogicalDiskObj = C:</OBJECTNAME>

    <FULLPATHOBJECTNAME>

  </FULLPATHOBJECTNAME>

  <FULLPATHDELIM>

  </FULLPATHDELIM>

  <UNIT>MB</UNIT>

  </LEGENDDETAIL>

</APPMANAGER>
```

A.4 Required XML Tags

The following XML tags are required in a dynamic legend:

XML Tag	Description
<ORIGINKSNAME>	The full name of the Knowledge Script.
<APPLICATION>	A valid AppManager application name such as NT, IIS, or SQL. You can query the Component table in the AppManager repository to get a list of valid application names.
<DESCRIPTION>	<p>The static description of the data stream.</p> <p>This should describe the data stream without using dynamic data such as server name, drive letter, database name, or variable information. For example, Logical Disk Space Available (MB).</p>

XML Tag	Description
<OBJECTINFO>	The dynamic description of the data stream. This should describe the data stream using dynamic data such as server name, drive letter, database name, or other variable information. For example, Logical Disk C:
<UNIT>	The unit applied to the data. For example: <ul style="list-style-type: none"> ♦ % ♦ # ♦ MB ♦ KB ♦ Msec ♦ Sec

A.5 Adding a Dynamic Legend to a Knowledge Script

To provide a dynamic legend for a data stream collected by a Knowledge Script, use the `CreateData` callback. The `CreateData` callback replaces the `DataHeader`, `DataLog`, and `DynaCreateData` callbacks in the following format:

```
CreateData streamId, legend, dynalegend, objlist, val, agentmsg, msgtype [,schema]
[,loglimit] [,lowWM] [,hiWM] [,deletefile]
```


B Working with Legend Rules

Analysis Center relies on legend rules to process the AppManager data that define Knowledge Script data streams from older Knowledge Scripts that do not support the newer dynamic XML legends, or that are not properly formed dynamic XML. These rules configure Analysis Center to map each non-dynamic legend to a unique Metric dimension member in the Data Warehouse.

You can remove any legend rule that maps incorrectly or is no longer valid. You can also add a legend rule that you previously removed.

For more information about dynamic legends, see [Chapter A, "Adding Dynamic Legends to AppManager Knowledge Scripts,"](#) on page 71.

- ♦ [Section B.1, "Identifying a Legend Rule,"](#) on page 75
- ♦ [Section B.2, "Removing a Legend Rule,"](#) on page 76
- ♦ [Section B.3, "Creating the Removal XML File,"](#) on page 76
- ♦ [Section B.4, "Issuing xmlcheckin,"](#) on page 77
- ♦ [Section B.5, "Adding a Legend Rule,"](#) on page 78

B.1 Identifying a Legend Rule

You can easily identify any legend rule. The legend rules are contained in XML files sorted by AppManager module name in C:\Program Files\NetIQ\Analysis Center\Config\Legend on the Data Warehouse computer.

For example, in CIM.LEGEND.XML, you can see the mapping of the ASR Reboot Count data stream legend of the CIM_ASRHealth Knowledge Script.

```
<RULE ID="CIM_ASRHealth.1">

  <EXPRESSION>^ASR Reboot Count$</EXPRESSION>

  <ITEM IDX="0" LABEL="Number of Reboots" MATCH="TRUE" />

  <UNITS>#</UNITS>

  <KSName>CIM_ASRHealth</KSName>

  <ACApplication>CIM</ACApplication>

  <ACObject NAME="" />

  <ACMetricCategory NAME="" />

  <SampleHiddenLegend>ASR Reboot Count</SampleHiddenLegend>

  <StaticDataDescription>Automatic Server Recovery (ASR) Health</
StaticDataDescription>

  <DynamicDataFormat>Number of Reboots</DynamicDataFormat>

  <Type NAME="CIMT_ASR" />
```

</RULE>

Knowledge Scripts that collect more than one data stream will have more than one rule. The additional rules for the data stream will have a unique number assigned to the rule. So in the above example, if there were a second data stream rule for the CIM_ASRHealth Knowledge Script, the "ID" for the rule would be CIM_ASRHealth.2.

B.2 Removing a Legend Rule

You remove a legend rule by defining it in XML, and thereafter, pass the rule to the `XmlCheckIn` utility. The first step in the legend rule removal process is to mark the rule for removal. When a rule is marked as removed it will not be included in future legend processing unless it is re-added. Removing a legend rule can have one of the two consequences, depending on the status of the rule.

- ♦ **Processed legend.** The rule for a legend that has already been mapped, is *marked* as deleted in the Data Warehouse database. In this scenario, the rule cannot be physically removed because it has been used, but because it is marked for deletion, it will never be used again.
- ♦ **Unprocessed legend.** The rule for a legend that has never been mapped, is physically removed from the list of rules stored in the Data Warehouse database.

To remove a legend rule:

- 1 Create an XML file that identifies the rule that you want to remove. For more information, see [Section B.3, "Creating the Removal XML File," on page 76](#)
- 2 Run the `xmlcheckin` command. For more information, see [Section B.4, "Issuing xmlcheckin," on page 77](#)

B.3 Creating the Removal XML File

Your XML file can identify one or more rules that you want to remove. If you are removing several rules that have the same prefix or suffix, you can use a percent(%) wildcard character.

To remove one or more rules without using a wildcard character, create an XML file that has the following format:

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

- <xml>

- <LEGENDPARSERS>

- <LEGENDPARSER>

  <DELETERULE ID="ruleID" />

</LEGENDPARSER>

</LEGENDPARSERS>

</xml>
```

where `ruleID` is the name of the rule taken from the rules XML file. For more information, see [Section B.1, "Identifying a Legend Rule," on page 75](#). Use the `<DELETERULE ID>` tag once for each rule that you want to delete.

To remove multiple rules using a wildcard character, create an XML file that has the following format:

```
<?xml version="1.0" encoding="UTF-8" ?>
- <xml>
- <LEGENDPARSERS>
- <LEGENDPARSER>
  <DELETERULE WildCard="prefixofrule.%" />
</LEGENDPARSER>
</LEGENDPARSERS>
</xml>
```

where `prefixofrule` is the portion of the rule name common to all of the rules that you want to delete. Be sure that there are not any rules that you want to keep that have the same prefix. If there are, then you will want to provide a more specific prefix, or supply `<DELETERULE ID>` tags to list the specific rules that you want to delete.

You can use a combination of `<DELETERULE ID>` and `<DELETERULE WildCard>` tags in your file. For example:

```
<?xml version="1.0" encoding="UTF-8" ?>
- <xml>
- <LEGENDPARSERS>
- <LEGENDPARSER>
  <DELETERULE WildCard="NT_PhysicalDiskB%" />
  <DELETERULE ID="Commerce_AuthCheckSuccess.1" />
</LEGENDPARSER>
</LEGENDPARSERS>
</xml>
```

Save your removal XML file as `<nameoffile>.xml`.

B.4 Issuing xmlcheckin

From a command prompt at the root of the Analysis Center\bin directory, enter the following command: `xmlcheckin <nameoffile>.xml`

If your `<nameoffile>.xml` is not located in the \bin directory, include the full path in the command, for example:

```
xmlcheckin C:\temp\<nameoffile>.xml
```

B.5 Adding a Legend Rule

You can add a legend rule that has been deleted or marked for deletion.

To add a legend rule:

- 1 Create an XML file that identifies the rule you want to add, in the following format:

```
<?xml version="1.0" encoding="UTF-8" ?>
- <xml>
- <LEGENDPARSERS>
- <LEGENDPARSER>
  <ADDRULE ID="ruleID" />
</LEGENDPARSER>
</LEGENDPARSERS>
</xml>
```

where `ruleid` is the name of the rule that you want to add.

- 2 Save the file as `<nameoffile>.xml`.
- 3 Issue the following command from a command prompt at the root of the `\bin` directory:
`xmlcheckin <nameoffile>.xml`.

C FIPS Solutions

This appendix includes suggestions for resolving issues that you might encounter when using Analysis Center in an environment that complies with Federal Information Processing Standards (FIPS). If you need further assistance, please contact [NetIQ Technical Support \(http://www.netiq.com/Support/contactinfo.asp\)](http://www.netiq.com/Support/contactinfo.asp).

- ♦ [Section C.1, “Installation and Configuration Issues,” on page 79](#)
- ♦ [Section C.2, “SSRS Report Manager Issue,” on page 80](#)
- ♦ [Section C.3, “Unable to open Analysis Center 2.9 console after an upgrade,” on page 80](#)
- ♦ [Section C.4, “ETL Job Failure,” on page 80](#)

C.1 Installation and Configuration Issues

Depending on the level of security applied in your environment, you might not be able to complete the setup program or run Analysis Center. If your environment is FIPS-encryption-enabled or just highly secured, try the following security configurations:

- ♦ To run the setup program, use the domain account that will be used as the Reporting Center service account.
- ♦ When launching the installation package, use the **Run as Administrator** command.
- ♦ Instead of running the setup program using Remote Desktop Protocol (RDP), use **console session 0** mode.
- ♦ If necessary, temporarily disable the FIPS encryption policy setting during installation only.
- ♦ Add the Reporting Center service account to the local security policy settings for Impersonation and delegation.
- ♦ Add the following user rights to the Reporting Center service account:
 - ♦ Enable computer and user accounts to be trusted for delegation
 - ♦ Impersonate a client after authentication
- ♦ Configure the SQL Server service account to use the Reporting Center service account.
- ♦ If necessary, temporarily disable UAC for the Reporting Center service account during installation.
- ♦ Verify the IIS_IUSRS group permissions on the Reporting Center, IIS, and ASP.NET directories.
- ♦ Verify the Components Services (dcomcnfg) MSDTC security configurations, and enable them for network access.
- ♦ Enable the SQL Server Browser Service on servers where Reporting Center components will be hosted.
- ♦ Where the Windows Firewall is enabled, add explicit exceptions for IIS, SQL, Analysis Services, MSDTC, and Integration Services, where appropriate.
- ♦ Where the Windows Firewall is enabled, add explicit exceptions for the NetIQ Reporting Console (`NRConsole.exe`) after Reporting Center has been installed successfully.

C.2 SSRS Report Manager Issue

According to Microsoft, Microsoft SQL Server 2008 Reporting Services and SQL Server 2008 R2 Reporting Services have the following limitation.

Report Manager fails after you enable FIPS-compliant algorithms in Local Security Policy

When running Microsoft SQL Server 2008 Reporting Services and SQL Server 2008 R2 Reporting Services, you cannot use Report Manager if you enable the following Local Security Policy:

System cryptography: Use FIPS compliant algorithms for encryption, hashing, and signing.

There is no workaround for this issue. To use Report Manager, disable the setting and restart the Report Server service. For more information about this issue, see <http://msdn.microsoft.com/en-us/library/ms345220.aspx>.

For additional configuration options, see [Microsoft Knowledge Base article \(http://support.microsoft.com/kb/911722\)](http://support.microsoft.com/kb/911722).

C.3 Unable to open Analysis Center 2.9 console after an upgrade

After upgrading to Analysis Center 3.2, if you want to use the Analysis Center 2.9 console to view the Analysis Center 2.9 reports, the console fails to open.

To open the Analysis Center 2.9 console after the upgrade, you need to execute the following query against the AC_Configuration database using SQL Server Management Studio:

```
USE AC_Configuration
GO

UPDATE rSecuredCntxProperty
SET Value = '3.2.<build number>.0'
WHERE Name in ('Database.Version', 'Assembly.FileVersion' )
GO
```

NOTE: Replace <build number> in the query with the build number of Analysis Center 3.2 that you have installed.

C.4 ETL Job Failure

When you run the ETL jobs, the transaction logs are being generated, which keeps on increasing in size in every ETL cycle leading to ETL jobs failure.

To restrict these logs from being generated and prevent the failure of the ETL jobs, you need to execute the following query in the SQL Server Query Analyzer against the corresponding Data Mart database:

```
EXEC dbo.SetsetValue 'RestrictTransactionLog','TRUE',1
```


For more information on restricting the transaction logs, see [Section 8.5, “Restricting the ETL Transaction Logs,” on page 65](#).

