

Report Designer Guide

Package 2011, version 1 and Package 3

Part Number FNM-1500-RDG01

Legal Information

Book Name: FlexNet Manager 15.0 Report Designer Guide for Package 3
Part Number: FNM-1500-RDG01
Product Release Date: 30 June 2011

Copyright Notice

Copyright © 2001–2011 Flexera Software, Inc. and/or InstallShield Co. Inc. All Rights Reserved.

This product contains proprietary and confidential technology, information and creative works owned by Flexera Software, Inc. and/or InstallShield Co. Inc. and their respective licensors, if any. Any use, copying, publication, distribution, display, modification, or transmission of such technology in whole or in part in any form or by any means without the prior express written permission of Flexera Software, Inc. and/or InstallShield Co. Inc. is strictly prohibited. Except where expressly provided by Flexera Software, Inc. and/or InstallShield Co. Inc. in writing, possession of this technology shall not be construed to confer any license or rights under any Flexera Software, Inc. and/or InstallShield Co. Inc. intellectual property rights, whether by estoppel, implication, or otherwise.

All copies of the technology and related information, if allowed by Flexera Software, Inc. and/or InstallShield Co. Inc., must display this notice of copyright and ownership in full.

Trademarks

Flexera Software, FlexEnabled, FLEX/m, FlexNet, FlexNet Manager, FlexNet Publisher, InstallAnywhere, and InstallShield are registered trademarks or trademarks of Flexera Software, Inc. and/or InstallShield Co. Inc. in the United States of America and/or other countries. All other brand and product names mentioned herein are the trademarks and registered trademarks of their respective owners.

Restricted Rights Legend

The software and documentation are “commercial items,” as that term is defined at 48 C.F.R. §2.101, consisting of “commercial computer software” and “commercial computer software documentation,” as such terms are used in 48 C.F.R. §12.212 or 48 C.F.R. §227.2702, as applicable. Consistent with 48 C.F.R. §12.212 or 48 C.F.R. §227.2702-1 through 227.7202-4, as applicable, the commercial computer software and commercial computer software documentation are being licensed to U.S. government end users (A) only as commercial items and (B) with only those rights as are granted to all other end users pursuant to the terms and conditions set forth in the Flexera Software, Inc. standard commercial agreement for this software. Unpublished rights reserved under the copyright laws of the United States of America.

Contents

| | | |
|----------|--|-----------|
| 1 | Introduction..... | 5 |
| 2 | Report Designer Reports for Package 2011..... | 6 |
| | Feature Usage by Organization Table Report | 7 |
| | Feature Usage Table Report | 8 |
| | Organization Total Usage Chart Report | 9 |
| | Peak Usage by Organization Over Time Report | 10 |
| | Peak Usage by Server Over Time Report..... | 11 |
| | Operational Dashboard Widgets..... | 12 |
| 3 | Report Designer Data Model for Package 2011 | 14 |
| | Determining Which Model To Use | 15 |
| | Data Model Descriptions..... | 16 |
| | Feature-Org OLAP | 16 |
| | Feature-Leaf OLAP | 19 |
| | Product-Org OLAP | 20 |
| | Org-Feature-Product Details (Namespace) | 23 |
| | Query Subjects | 23 |
| | Operational Data..... | 37 |
| | Operational Data Query Subjects..... | 38 |
| 4 | Report Designer Reports for Package 3..... | 45 |
| | Aggregation History Report | 47 |
| | Data Warehouse Dashboard Report..... | 47 |
| | Feature Chargeback Report | 47 |
| | Feature Usage Report | 48 |

| | |
|---|---------------|
| Feature Usage Report (Previous Month) | .49 |
| Feature Usage Report (by Month) | .49 |
| Geographic Feature Usage Report | .49 |
| Organization Peak Usage by Feature Report. | .50 |
| Usage Summary Report by Organization. | .51 |
| Product Chargeback Report | .51 |
| Product Daily Peak Usage Report | .52 |
| Feature Peak Usage by Product Report. | .53 |
| Product Peak Usage Report | .54 |
| Product Peak Usage Occurrences Report. | .55 |
| Product Peak Usage Trend (Remix) Report. | .56 |
| Organization Peak Usage Summary Report | .57 |
| 5 Report Designer Reporting Data Model for Package 3 | 59 |
| Measure (Fact) Tables. | .59 |
| Feature Leaf Usage Facts. | .59 |
| Feature Usage Facts. | .61 |
| Product Usage Facts | .62 |
| ProductFeature Usage Facts | .64 |
| Product Availability Facts | .65 |
| Dimension Tables | .66 |
| TimeDimension. | .66 |
| FeatureDimension. | .68 |
| ProductDimension | .69 |
| ProductFeature | .69 |
| User. | .70 |
| Project. | .72 |
| License Server Host | .72 |
| Vendor Daemon | .73 |
| Organizational Structure Tables. | .74 |
| Organization | .74 |
| Other Tables. | .75 |
| SoftwareProducer | .75 |
| SoftwareVendor | .76 |
| PoolProductLicenses | .76 |
| PoolProduct | .77 |
| Pool. | .78 |
| Contract | .79 |
| Diagrams | .80 |
| Index | 90 |

Introduction

FlexNet Report Designer is built on the Cognos BI reporting engine, and enables you to gather, collate and report on all of your FlexNet licensing activity. Report Designer includes complete tools for managing, creating, and editing both simple and complex reports.

Report Designer Package 2011 (FlexNetManagerSuite.zip) provides predefined reports and the reporting model on which FlexNet Report Designer reporting is based. This package also provides the reports that are used as widgets in the Operational Dashboard, introduced in FlexNet Manager for Engineering Applications 15.0.

A legacy package (Package 3) is also provided for enterprises who may have created custom reports using the earlier data model.

This document provides information about the data model and about the available reports provided with each of the Report Designer packages.

- [Report Designer Reports for Package 2011](#)—Describes the predefined reports that are available with Package 2011 when using the Report Designer tab in the FlexNet Manager for Engineering Applications interface.
- [Report Designer Data Model for Package 2011](#)—Provides detailed information about the data model for Package 2011.
- [Report Designer Reports for Package 3](#)—Describes the predefined reports that are available with Package 3 when using the Report Designer tab in the FlexNet Manager for Engineering Applications interface.
- [Report Designer Reporting Data Model for Package 3](#)—Provides detailed information about the data model for Package 3, including diagrams of the model's structure.

Report Designer Reports for Package 2011

You access Report Designer reports using the Report Designer tab beneath the Reports tab in the FlexNet Manager for Engineering Applications interface. You can also access the mini-reports that are used as widgets in the Operational Dashboard. (See the section, [Operational Dashboard Widgets](#), for more information.)



Task: *To access the predefined reports for Package 2011:*

1. In the FlexNet Manager for Engineering Applications user interface, click the **Report Designer** tab, then click the **Custom Reporting** link on the left side of the screen.
2. In the Cognos Connection pane, click the **FlexNet Manager Suite** folder to open it.
3. On the next screen, click the **FlexNet Manager for Engineering Applications Reports** folder.
4. On the next screen, click one of the following:
 - To access predefined reports, click the **Historical Feature Reports** link.
 - To access Operational Dashboard widgets, click the **Dashboard Widgets** link, then click the **Real Time Reports** link.
5. Click a report name to move to the report's prompt screen.



Note • *These predefined reports are available only if you have Report Designer Package 2011 installed.*

The following predefined reports are available for Package 2011:

- [Feature Usage by Organization Table Report](#)
- [Feature Usage Table Report](#)
- [Organization Total Usage Chart Report](#)
- [Peak Usage by Organization Over Time Report](#)

- [Peak Usage by Server Over Time Report](#)

To run a basic version of a report, click the report name. You will be shown the parameters you can set via drop-down menus, as well as the option to view a description of the report including explanations of the parameters. For all of the reports, you can choose to run the report using hourly, daily, or monthly data. Your choice will depend on whether you want more data granularity (hourly) or better report performance (monthly).

You can perform a number of other actions on each report, which are shown to the right of the report name. You can select the following:

- Set properties
- Run with options
- Open with Report Studio
- Create a report view of this report
- Schedule

Feature Usage by Organization Table Report

This report displays the total used time for selected features for users in an organization, and allows for additional filtering by organizational units.

Feature Usage by Organization Table

Start Date: Jun 1, 2007 12:00:00 AM
End Date: Jul 31, 2007 12:00:00 AM
Vendor: magma
Features: BLAST_BUILDER, BLAST_CREATE, BLAST_FUSION_APX, BLAST_PLAN, BLAST_PLANPRO, BLAST_PLANSVP, BLAST_POWER, BLAST_RAIL, BLAST_SI, BLAST_SPEED, BLAST_VIEW, BLAST_WRAP, QUARTZ_TIME

| Feature Name | Year | Month | Org Node Name L2 | Org Node Name L3 | Org Node Name L4 | User Name | Total Used Time (hours) | First Name | Last Name | E-mail | Phone Number |
|------------------|------|-------|------------------|------------------|------------------|-----------|-------------------------|------------|-----------|--------------------|--------------|
| BLAST_BUILDER | 2007 | June | Shanghai | B11 | C113 | robc | 7.22 | Rob | Cee | robc@server.com | 555-1111 |
| | | | | B12 | N/A | sophias | 1.64 | Sophia | See | sophias@server.com | 555-1112 |
| | | | | B13 | N/A | alexp | 7.74 | Alex | Pi | alexp@server.com | 555-1113 |
| | | July | Shanghai | B12 | N/A | sophias | 7.53 | Sophia | See | sophias@server.com | 555-1112 |
| | | | | B13 | N/A | alexp | 29.83 | Alex | Pi | alexp@server.com | 555-1113 |
| | | | Washington DC | B21 | B22 | lorie | 0.03 | Lori | Ee | lorie@server.com | 555-1116 |
| | | | | | | tomv | 0.69 | Tommy | Vee | tomv@server.com | 555-1115 |
| BLAST_CREATE | 2007 | June | Shanghai | B11 | C113 | robc | 0.23 | Rob | Cee | robc@server.com | 555-1111 |
| | | | | B12 | N/A | sophias | 0.33 | Sophia | See | sophias@server.com | 555-1112 |
| | | | | B13 | N/A | alexp | 8.97 | Alex | Pi | alexp@server.com | 555-1113 |
| | | July | Shanghai | B12 | N/A | sophias | 0.07 | Sophia | See | sophias@server.com | 555-1112 |
| | | | | B13 | N/A | alexp | 13.22 | Alex | Pi | alexp@server.com | 555-1113 |
| | | | Washington DC | B21 | B22 | lorie | 0.03 | Lori | Ee | lorie@server.com | 555-1116 |
| | | | | | | | | | | | |
| BLAST_FUSION_APX | 2007 | June | Shanghai | B11 | C113 | robc | 0.01 | Rob | Cee | robc@server.com | 555-1111 |
| | | | | B13 | N/A | alexp | 9.27 | Alex | Pi | alexp@server.com | 555-1113 |
| | | July | Shanghai | B12 | N/A | sophias | 0.46 | Sophia | See | sophias@server.com | 555-1112 |
| | | | | B13 | N/A | alexp | 20.51 | Alex | Pi | alexp@server.com | 555-1113 |
| | | | Washington DC | B21 | B22 | lorie | 10.15 | Lori | Ee | lorie@server.com | 555-1116 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| BLAST_PLAN | 2007 | June | Shanghai | B13 | N/A | alexp | 0.16 | Alex | Pi | alexp@server.com | 555-1113 |
| | | July | Shanghai | B13 | N/A | alexp | 0.14 | Alex | Pi | alexp@server.com | 555-1113 |

[Filters\(show/hide\)](#)

Level 2 Org Node:

Level 3 Org Node:

Level 4 Org Node:

Figure 2-1: Feature Usage by Organization Table report

Feature Usage Table Report

This report displays the total used time for selected features, listed by license server. Optionally, peak usage may also be displayed *if* a license server-based organization has been created (prior to aggregation).

Feature Usage Table

Start Date: June 1, 2007
End Date: July 31, 2007
Vendor: magma
Features: BLAST_BUILDER, BLAST_CREATE, BLAST_FUSION_APX, BLAST_PLAN, BLAST_PLANPRO, BLAST_PLANSVP, BLAST_POWER, BLAST_
BLAST_SPEED, BLAST_VIEW

| Feature Name | Year | Month | License Server Name | Availability Max Count | Peak Licenses | Available Time (hours) | Total Time Used (hours) | Percentage of Hours Used |
|-------------------------|-------------|-------------|---------------------|------------------------|---------------|------------------------|-------------------------|--------------------------|
| BLAST_BUILDER | 2007 | June | ServerORD | 2 | 2 | 192 | 16.61 | 8.65% |
| | | June | | | | 192 | 16.61 | 8.65% |
| | | July | ServerORD | 2 | 2 | 336 | 38.08 | 11.33% |
| | | July | | | | 336 | 38.08 | 11.33% |
| | 2007 | | | | | 528 | 54.69 | 10.36% |
| BLAST_BUILDER | | | | | | 528 | 54.69 | 10.36% |
| BLAST_CREATE | 2007 | June | ServerORD | 2 | 2 | 192 | 9.54 | 4.97% |
| | | June | | | | 192 | 9.54 | 4.97% |
| | | July | ServerORD | 2 | 2 | 336 | 13.32 | 3.96% |
| | | July | | | | 336 | 13.32 | 3.96% |
| | 2007 | | | | | 528 | 22.85 | 4.33% |
| BLAST_CREATE | | | | | | 528 | 22.85 | 4.33% |
| BLAST_FUSION_APX | 2007 | June | ServerORD | 2 | 2 | 192 | 9.29 | 4.84% |
| | | June | | | | 192 | 9.29 | 4.84% |
| | | July | ServerORD | 2 | 2 | 336 | 31.11 | 9.26% |
| | | July | | | | 336 | 31.11 | 9.26% |
| | 2007 | | | | | 528 | 40.40 | 7.65% |
| BLAST_FUSION_APX | | | | | | 528 | 40.40 | 7.65% |
| BLAST_PLAN | 2007 | June | ServerORD | 2 | 2 | 192 | 0.16 | 0.08% |
| | | June | | | | 192 | 0.16 | 0.08% |
| | | July | ServerORD | 2 | 1 | 336 | 0.17 | 0.05% |
| | | July | | | | 336 | 0.17 | 0.05% |
| | 2007 | | | | | 528 | 0.33 | 0.06% |
| BLAST_PLAN | | | | | | 528 | 0.33 | 0.06% |
| BLAST_PLANPRO | 2007 | June | ServerORD | 2 | 2 | 192 | 0.12 | 0.06% |
| | | June | | | | 192 | 0.12 | 0.06% |
| | | July | ServerORD | 2 | 1 | 336 | 0.17 | 0.05% |
| | | July | | | | 336 | 0.17 | 0.05% |
| | 2007 | | | | | 528 | 0.29 | 0.05% |
| BLAST_PLANPRO | | | | | | 528 | 0.29 | 0.05% |

Figure 2-2: Feature Usage Table report

Organization Total Usage Chart Report

This report displays a chart depicting the total used time for selected features by portions of the organization. Drill-through functionality in the report enables you to look into lower levels of the organization.

Organization Total Usage Chart

Start Date: February 1, 2007
End Date: July 31, 2007
Vendor: magma
Features: BLAST_BUILDER, BLAST_CREATE, BLAST_FUSION_APX, BLAST_PLAN, BLAST_PLANPRO, BLAST_PLANSVP, BLAST_POWER, BLAST_SPEED, BLAST_VIEW

| Org Node Name L2 | Feature Name | Total Used Time (hours) |
|----------------------|------------------|-------------------------|
| Shanghai | BLAST_BUILDER | 53.97 |
| | BLAST_CREATE | 22.83 |
| | BLAST_FUSION_APX | 30.25 |
| | BLAST_PLAN | 0.30 |
| | BLAST_PLANPRO | 0.26 |
| | BLAST_PLANSVP | 0.26 |
| | BLAST_POWER | 0.03 |
| | BLAST_RAIL | 1.57 |
| | BLAST_SI | 2.76 |
| | BLAST_SPEED | 44.32 |
| | BLAST_VIEW | 88.18 |
| Shanghai | | 244.72 |
| Washington DC | BLAST_BUILDER | 0.72 |
| | BLAST_CREATE | 0.03 |
| | BLAST_FUSION_APX | 10.15 |
| | BLAST_PLAN | 0.03 |
| | BLAST_PLANPRO | 0.03 |
| | BLAST_PLANSVP | 0.03 |
| | BLAST_RAIL | 0.02 |
| | BLAST_SI | 0.02 |
| | BLAST_SPEED | 6.15 |
| | BLAST_VIEW | 11.15 |
| Washington DC | | 28.33 |
| Summary | | 273.06 |

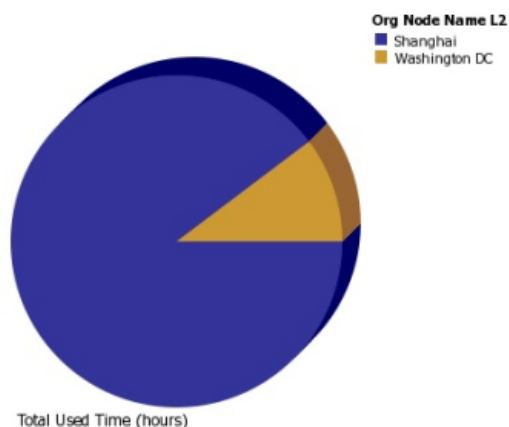


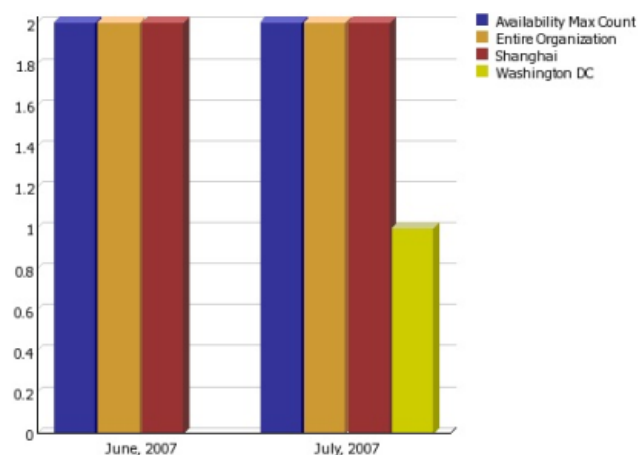
Figure 2-3: Organization Total Usage Chart report

Peak Usage by Organization Over Time Report

This report displays a chart for the Peak Usage of specified features by the entire organization, and by the different nodes within the organization. The report also shows feature availability. A separate chart is produced for each of the specified features.

Peak Usage by Organization Over Time

Start Date: Jun 1, 2007 12:00:00 AM
 End Date: Jul 31, 2007 12:00:00 AM
 Organization: neworg
 Vendor: magma
 Feature: BLAST_BUILDER

**BLAST_BUILDER**

| Year | Month | Org Node Name | Availability Max Count | Peak Licenses |
|------|-------|---------------------|------------------------|---------------|
| 2007 | June | Entire Organization | 2 | 2 |
| | | Shanghai | 2 | 2 |
| | July | Entire Organization | 2 | 2 |
| | | Shanghai | 2 | 2 |
| | | Washington DC | 2 | 1 |

Figure 2-4: Peak Usage by Organization Over Time report

Peak Usage by Server Over Time Report

This report displays an area chart showing the peak licenses that have been used from each license server, with reference to the total number of available licenses.

Peak Usage by Server Over Time

Start Date: Jun 2, 2007
End Date: Jul 25, 2007
Vendor: magma
Features: BLAST_BUILDER

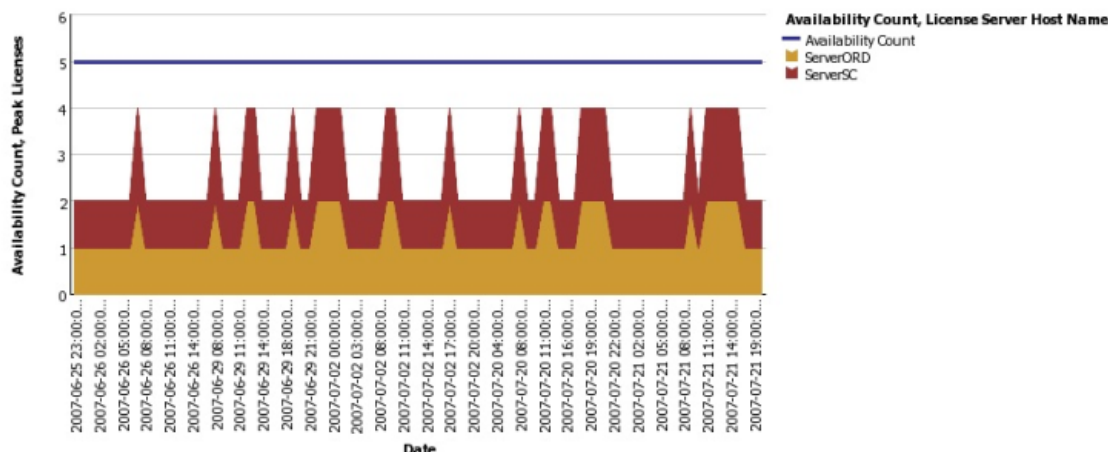


Figure 2-5: Peak Usage by Server Over Time report

Operational Dashboard Widgets

Report Designer Package 2011 also provides the reports that are used as *widgets* in the Operational Dashboard. These are small, self-contained reports that you can move around the dashboard space. By default, the following report widgets are displayed.

- **Feature Usage**—An area graph that shows feature usage for a specified time period. The red line at the top of the graph represents total availability for the feature. Use the menus in the upper-left corner of the widget to filter usage data by time period and feature name (by selecting the vendor name first, then specifying the feature name for which you want to see usage data). The time period you specify for the Feature Usage report widget is the time period that is used for the Features by Peak Usage report widget. Changing the time period for either report updates the data displayed in the other report.
- **Features by Peak Usage**—A table showing the 100 features with the highest peak usage for a given time period. The table provides the vendor name, feature name, type of license (whether FlexNet or LUM), the peak percentage used within the time period, and a small area graph showing usage for the time period. (The red line represents total availability for the feature during the specified time period.) Selecting All Data for the time period shows data for a rolling two-week period. The time period you specify for the Features by Peak Usage report widget is the time period that is used for the Feature Usage report widget. Changing the time period for either report updates the data displayed in the other report.
- **Excessive Users (by time)**—A table that shows the users who have the highest feature usage (measured by time of usage and the number of licenses). Use the menu at the top to specify whether you want to see excessive usage across all features or only for a specific feature.

- **Feature Denials**—A bar graph that shows license denials for a rolling two-week period. Use the menu at the top of the widget to show all denials during the time period or only capacity-based denials, where a feature is denied because it is being used up to its current capacity. Viewing capacity-based denials can help you determine whether you need to free up some licenses or perhaps purchase some additional licenses for a specific feature.
- **License Server Status**—A table showing the status of the license servers in your environment. The Type column identifies whether the server is a FlexNet license server (FLEX) or a LUM license server (LUM).

You can create your own reports and add them as report widgets to the dashboard.

See the *FlexNet Manager for Engineering Applications 15.0 Help Library* or the *FlexNet Manager for Engineering Applications 15.0 User Guide* for more information about the Operational Dashboard.

Report Designer Data Model for Package 2011

The Report Designer Package 2011 data model comprises several discrete models that contain all of the related information that would be required to generate a report on a specific topic. After you select which model to use, each piece of data will be correctly related to every other piece of data, provided you include only items from that one model. To select which model to use, you should make some decisions upfront about what content your report will include, which will then dictate which model should be used.

The models included are:

- **Feature-Org OLAP**—Set of models for online analytical processing for feature-license usage by an organization over time.
- **Feature-Leaf OLAP**—Set of models for online analytical processing for feature-license usage by a user, from a license server host, and/or for a project, over time.
- **Product-Org OLAP**—Set of models for online analytical processing for product-license usage by an organization over time.
- **Operational Data**—Set of models for online analytical processing for feature usage from a single license server or from all license servers. This model enables processing of usage for both FlexNet and LUM license servers and serves as the basis for the report widgets available to the Operational Dashboard.

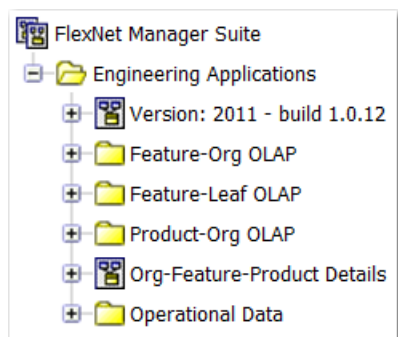


Figure 3-1: Folder structure in Query Studio (Cognos)

Within each model, you can choose to use hourly, daily, or monthly data for your report. Hourly data provides more granularity; however, monthly data results in better (faster) report performance. For the models that use organization structures (Feature-Org OLAP and Product-Org OLAP), multiple levels are available. Your choice of level depends on what data you want to see and the depth of your enterprise's hierarchy.

Determining Which Model To Use

Before creating a report, answer the following questions:

- Will the report deal with product usage or feature usage?
- If it is Feature Usage, will it use an Organization structure (all Product Usage reports must use an Organization Structure)?
- Will the report rely on Hourly, Daily, or Monthly data? Monthly is desirable for better performance.
- Is there a certain level of the Organization that should be reported on?

Each of these questions is closely related to the path that should be taken down the data model hierarchy (in Query Studio or Report Studio), to determine from which model you should pull items to create a report.

Consider the following example: Assume aggregation has been completed and there is already in place an organizational structure with the following levels underneath the top level: Business Unit, Cost Center, and User. To create a report that displayed quarterly feature usage by business unit, you would find your model as follows:

1. First, open the 'Feature-Org OLAP' folder because you are interested in Feature usage (not product), and would like to use your Organizational Structure instead of leaf data.
2. Second, select the 'Feature Monthly' subfolder. Because this is a quarterly report, Monthly data contains enough granularity, and would yield better performance than Daily or Hourly data
3. Finally, you would choose the model F-M Level2. In the previous assumptions, Business Unit occupies the second level of the organization (underneath the top level), so the Level2 model is the correct choice.

With that choice made, any data available from F-M Level2 can be added to our report with assurances that it will be correctly linked to the rest of the data in our report, as long as everything was taken from this same model.

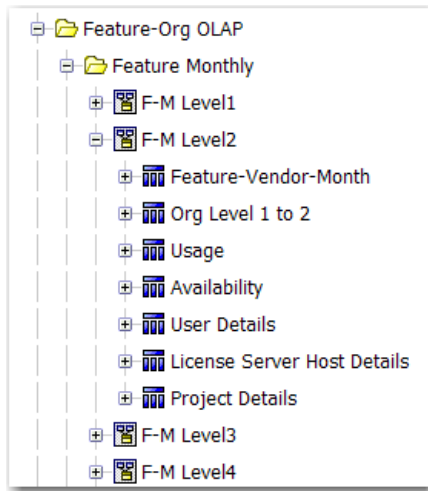


Figure 3-2: Feature-Org OLAP folder expanded for F-M Level2

Data Model Descriptions

Feature-Org OLAP

Feature-Org OLAP provides a set of models for online analytical processing for feature-license usage by an organization over time. In Cognos, the Feature-Org OLAP folder contains three subfolders:

- Feature Monthly—Report will use monthly data.
- Feature Daily—Report will use daily data.
- Feature Hourly—Report will use hourly data.

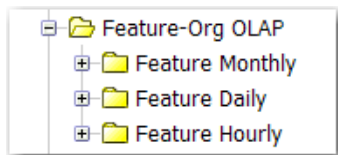


Figure 3-3: Feature-Org OLAP folder in Report Studio (Cognos)

Within each of the Feature-Org OLAP subfolders, there are five levels (namespaces), each of which represents a level in your organizational structure, with Level1 representing the top level. The level you select depends upon which level in your enterprise's organizational structure you are reporting on.

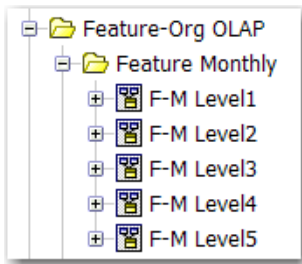


Figure 3-4: Feature Monthly folder expanded to show the levels

Within each level namespace are query subjects, some of which vary from one level to the next. When you choose a level to report on, you must work only with the query subjects in that level. For example, the following figure shows the query subjects that are available to work with when reporting on feature license usage using monthly data for Level3 of your organization.

The Feature Daily and the Feature Hourly folders are structured same way as the Feature Monthly folder. The difference is that this model is built on daily and hourly aggregation data, respectively. For the Feature Daily model, the data granularity is one day and, for the Feature Hourly model, the data granularity is one hour.

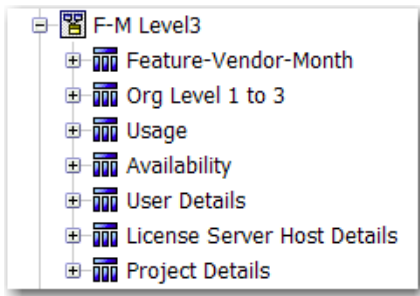


Figure 3-5: F-M Level3 namespace expanded to show query subjects.

F-M/D/H Level1

The Level1 namespace contains the following query subjects. Click the link to go to a description of the query subject.

Level1 namespaces do not have User Details, License Server Host Details, or Project Details query subjects because leaf-level objects cannot be Level1 organizational units.

- [Feature-Vendor-Month/Date/Hour](#)
- [Org Level 1](#)
- [Usage \(Organization Structure-Based\)](#)
- [Availability](#)

F-M/D/H Level2

The F-M Level2 namespace contains the following query subjects. Click the link to go to a description of the query subject.

- [Feature-Vendor-Month/Date/Hour](#)
- [Org Level 1 to 2](#)
- [Usage \(Organization Structure-Based\)](#)
- [Availability](#)
- [User Details](#)
- [License Server Host Details](#)
- [Project Details](#)

F-M/D/H Level3

F-M Level3 namespace contains the following query subjects. Click the link to go to a description of the query subject.

- [Feature-Vendor-Month/Date/Hour](#)
- [Org Level 1 to 3](#)
- [Usage \(Organization Structure-Based\)](#)
- [Availability](#)
- [User Details](#)
- [License Server Host Details](#)
- [Project Details](#)

F-M/D/H Level4

The F-M Level4 namespace contains the following query subjects. Click the link to go to a description of the query subject.

- [Feature-Vendor-Month/Date/Hour](#)
- [Org Level 1 to 4](#)
- [Usage \(Organization Structure-Based\)](#)
- [Availability](#)
- [User Details](#)
- [License Server Host Details](#)

- [Project Details](#)

F-M/D/H Level5

The F-M Level5 namespace contains the following query subjects. Click the link to go to a description of the query subject.

- [Feature-Vendor-Month/Date/Hour](#)
- [Org Level 1 to 5](#)
- [Usage \(Organization Structure-Based\)](#)
- [Availability](#)
- [User Details](#)
- [License Server Host Details](#)
- [Project Details](#)

Feature-Leaf OLAP

Feature-Leaf OLAP provides a set of models for online analytical processing for feature-license usage by a user, from a license server host, and/or for a project, over time. In Cognos, the Feature-Leaf OLAP folder contains three namespaces:

- Monthly—Report will use monthly data.
- Daily—Report will use daily data.
- Hourly—Report will use hourly data.

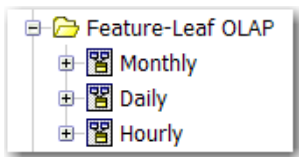


Figure 3-6: Feature-Leaf OLAP folder in Report Studio (Cognos).

Within each namespace are query subjects, which are the same for all of the namespaces. The only difference is the data on which the model is built. For example, the Monthly model is built on the monthly aggregation data (data granularity of one month), the Daily model is built on daily aggregation data (data granularity of one day), and the Hourly model is built on hourly aggregation data (data granularity of one hour).

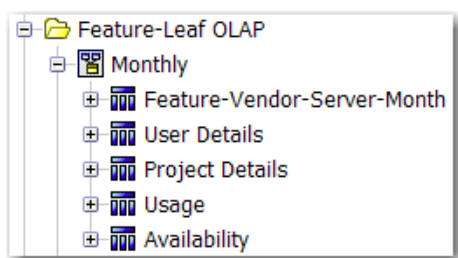


Figure 3-7: Feature-Leaf OLAP model with Monthly namespace expanded to show query subjects.

Monthly/Daily/Hourly

The namespaces in the Feature-Leaf OLAP model contain the following query subjects. Click the link to go to a description of the query subject.

- [Feature-Vendor-Month/Date/Hour](#) (contains some additional, self-explanatory properties that pertain to license server host)
- [User Details](#)
- [Project Details](#)
- [Usage \(Leaf Level-Based\)](#)
- [Availability](#)

Product-Org OLAP

Product-Org OLAP provides a set of models for online analytical processing for product-license usage by an organization over time. In Cognos, the Product-Org OLAP folder contains three subfolders:

- Product Monthly—Report will use monthly data.
- Product Daily—Report will use daily data.
- Product Hourly—Report will use hourly data.

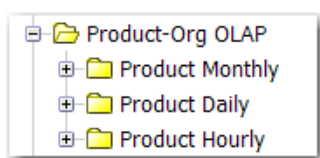


Figure 3-8: Product-Org OLAP folder in Report Studio (Cognos).

Within each of the Product-Org OLAP subfolders, there are five levels (namespaces), each of which represents a level in your organizational structure, with Level1 representing the top level. The level you select depends upon which level in your enterprise's organizational structure you are reporting on.

Both the Feature Daily and the Feature Hourly folders are structured same way as the Feature Monthly folder. The difference is that this model is built on daily and hourly aggregation data, respectively. For the Feature Daily model, the data granularity is one day and, for the Feature Hourly model, the data granularity is one hour.

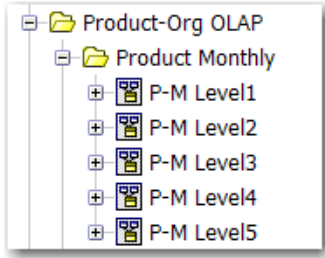


Figure 3-9: Product Monthly folder expanded to show the levels (namespaces).

Within each level namespace are query subjects, some of which vary from one level to the next. When you choose a level to report on, you must work only with the query subjects in that level. For example, the following figure shows the query subjects that are available to work with when reporting on feature license usage using monthly data for Level3 of your organization.

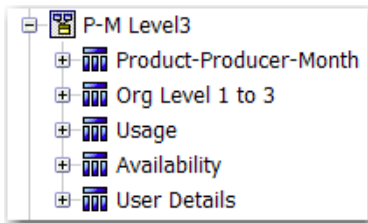


Figure 3-10: P-M Level3 namespace expanded to show query subjects

P-M/D/H Level1

The Level1 namespace contains the following query subjects. Click the link to go to a description of the query subject.

Level1 namespaces do not have User Details, License Server Host Details, or Project Details query subjects because leaf-level objects cannot be Level1 organizational units.

- [Product-Producer-Month/Day/Hour](#)
- [Org Level 1](#)
- [Usage \(Organization Structure-Based\)](#)
- [Availability](#)

P-M/D/H Level2

The Level2 namespace contains the following query subjects. Click the link to go to a description of the query subject.

- [Product-Producer-Month/Day/Hour](#)
- [Org Level 1 to 2](#)
- [Usage \(Organization Structure-Based\)](#)
- [Availability](#)
- [User Details](#)

P-M/D/H Level3

The Level3 namespace contains the following query subjects. Click the link to go to a description of the query subject.

- [Product-Producer-Month/Day/Hour](#)
- [Org Level 1 to 3](#)
- [Usage \(Organization Structure-Based\)](#)
- [Availability](#)
- [User Details](#)

P-M/D/H Level4

The Level4 namespace contains the following query subjects. Click the link to go to a description of the query subject.

- [Product-Producer-Month/Day/Hour](#)
- [Org Level 1 to 4](#)
- [Usage \(Organization Structure-Based\)](#)
- [Availability](#)
- [User Details](#)

P-M/D/H Level5

The Level5 namespace contains the following query subjects. Click the link to go to a description of the query subject.

- [Product-Producer-Month/Day/Hour](#)
- [Org Level 1 to 5](#)
- [Usage \(Organization Structure-Based\)](#)
- [Availability](#)
- [User Details](#)

Org-Feature-Product Details (Namespace)

The Org-Feature-Product Details namespace contains the following query subjects: Org Type, Feature, Vendor, Product, Software Producer. All these query subjects are standalone and do not have any underlying relationships. These query subject are useful for pre-populating prompts in the reports.

Query Subjects

Feature-Vendor-Month/Date/Hour

Describes all the given Features with their Vendors known for each month on the Time line. Feature/Vendor information comes from entitlement regardless of the usage. The properties available will vary depending on the namespace.

Table 3-1 • Feature-Vendor-Month properties

| Property | Description |
|----------------------------------|--|
| Vendor Name | Vendor name. |
| Feature Name | Feature name. |
| Year | Year. |
| Month | Month name. For example, December. |
| Month Num | Month number. For December, this would be 12. |
| Quarter | Quarter number. |
| Quarter Name | Quarter name. |
| Date (1st of Month) | First date of a month. |
| Month of Quarter | Whether the month is the first, second, or third in a given quarter. |
| Feature Software Category | Feature software category. |
| Cost Factor | Feature cost factor. |
| License System | License system. |
| Feature Display Name | Feature display name. |

Table 3-1 • Feature-Vendor-Month properties

| Property | Description |
|-----------------------------|--|
| Vendor Display Name | Vendor display name. |
| Time ID | Reference to the first day of a month in the Time Dimension query subject. |
| Feature ID | Reference to a Feature. |
| Vendor ID | Reference to a Vendor Daemon. |
| Software Producer ID | Reference to a Software Producer of a Feature. |

Org Level 1

This query subject contains the list of top organization units for different organization structure types.

Table 3-2 • Org Level 1 Properties

| Property | Description |
|-------------------------|---|
| Org Node Name L1 | Organization structure Level 1 node name. |
| Org Type Name | Organization structure type name. |
| Org Node ID L1 | The organization node ID that is referenced from the Usage query subject. |

Usage (Organization Structure–Based)

This query subject describes feature license utilization on the top level of organization structures.

Some of the query subject properties will vary, depending on whether you are working with the Feature-Org OLAP or the Product-Org OLAP model.

Table 3-3 • Usage Properties

| Property | Description |
|-------------------------|--|
| Usage Events | Number of Licenses in use at the time referenced by TIME_ID. |
| Ultimate Denials | <p>Total number of “true” denials during 1 month beginning at the time point referenced by TIME_ID.</p> <p>A true denial is an ultimate denial or folded denial, based on the configured false denials interval.</p> |

Table 3-3 • Usage Properties

| Property | Description |
|---------------------------------------|--|
| Peak Licenses | Peak number of licenses in use during one month beginning at the time point referenced by TIME_ID. |
| Total Used Time (hours) | Calculated cumulative time a license has been used during this month in hours. For example, 2 licenses in use during 1 hour would result in 2 hours of total use time. |
| Total Used Time (seconds) | Calculated cumulative time a license has been used during this month in seconds. For example, 2 licenses in use during 1 hour would result in 2 hours of total use time. |
| Elapsed Time at Peak (hours) | <p>The amount of time that was spent with the peak number of licenses checked out. For example, if there was one license checked out for an eight-hour day, and then a second license was checked out just for three hours during that day, the peak would be 2, and the Elapsed Time at Peak would be 3 hours.</p> <p>Applies to Product-Org OLAP only.</p> |
| Elapsed Time at Peak (seconds) | <p>The amount of time that was spent with the peak number of licenses checked out. For example, if there was one license checked out for the entire hour, and then a second license was checked out just for three minutes during that hour, the peak would be 2, and the Elapsed Time at Peak would be 180 seconds (3 minutes).</p> <p>Applies to Product-Org OLAP only.</p> |
| Duration at Capacity (hours) | <p>The amount of time spent when the number of checked-out licenses was equal to (or greater) than the number of licenses available. For the example provided in the Elapsed Time at Peak (hours) description, if there were three licenses available, the Duration at Capacity would be zero, but if it there were only two licenses available, the Duration at Capacity would be the same as the Elapsed Time at Peak: 3 hours.</p> <p>Applies to Product-Org OLAP only.</p> |
| Duration at Capacity (seconds) | <p>The amount of time spent when the number of checked-out licenses was equal to (or greater) than the number of licenses available. For the example provided in the Elapsed Time at Peak (seconds) description, if there were three licenses available, the Duration at Capacity would be zero, but if it there were only two licenses available, the Duration at Capacity would be the same as the Elapsed Time at Peak: 180 seconds.</p> <p>Applies to Product-Org OLAP only.</p> |
| Org Node ID | Reference to Organization Unit. |
| Time ID | Reference to Time. |
| Feature ID | <p>Reference to Feature.</p> <p>Applies to Feature-Org OLAP only.</p> |

Table 3-3 • Usage Properties

| Property | Description |
|-------------------|--|
| Product ID | Reference to Product. Applies to Product-Org OLAP only. |

Availability

This query subject describes a feature availability. This is global availability across an organization structure.

Some of the query subject properties will vary, depending on whether you are working with the Feature-Org OLAP or the Product-Org OLAP model

Table 3-4 • Availability Properties

| Property | Description |
|---------------------------------|---|
| Availability Max Count | Maximum available count of a feature's or product's licenses within a given month. |
| Available Time (hours) | Calculated cumulative time a license has been available during this month in hours. For example, 2 licenses were available during 24 hours would result in 48 hours of total available time. |
| Available Time (seconds) | Calculated cumulative time a license has been available during this month in seconds. For example, 2 licenses were available during 24 hours would result in 172,800 seconds of total available time. |
| Average List Price | Average list price to purchase a perpetual license for this product (before discounts). Applies to Product-Org OLAP only. |
| Average Net Price | Average net price to purchase a perpetual license for this product (after discounts). Applies to Product-Org OLAP only. |
| Average Net Cost | Average net price paid for a license (time-based or perpetual) for this product. Applies to Product-Org OLAP only. |
| Average Annual Fee | Average access fee (time-based licenses) or maintenance fee (perpetual licenses) for this product. Applies to Product-Org OLAP only. |
| Time ID | Reference to Time. |
| Feature ID | Reference to Feature. Applies to Feature-Org OLAP only. |

Table 3-4 • Availability Properties

| Property | Description |
|-------------------|--|
| Product ID | Reference to Product. Applies to Product-Org OLAP only. |

Org Level 1 to 2

This query subject describes an organization as a flat structure with two levels of an organization structure hierarchy.

Table 3-5 • Org Level 1 to 2 Properties

| Property | Description |
|----------------------------------|--|
| Org Node Name L1 | Organization structure Level 1 Node name |
| Org Node Name L2 | Organization structure Level 2 Node name. (Usage is defined for this level node.) |
| Org Type Name | Organization structure Type Name. |
| Org Node ID L1 | The organization node ID on Level 1. |
| Start Date L2-1 | The Effective start date (inclusive) of the hierarchy relationship between L2 node and L1 node. |
| End Date L2-1 | The Effective end date (exclusive) of the hierarchy relationship between L2 node and L1 node. |
| Time ID Start L2-1 | Reference to the Effective start date (inclusive) of the hierarchy relationship between L2 node and L1 node. |
| Time ID End L2-1 | Reference to the Effective end date (exclusive) of the hierarchy relationship between L2 node and L1 node. |
| Org Node ID L2 | The org. node ID that is referenced from the Usage query subject. |
| User ID L2 | Reference to a User. It is not null when a node is a leaf level User node. If a node is an intermediate node with children, it is always null. |
| Project ID L2 | Reference to a Project. It is not null when a node is a leaf level Project node. If a node is an intermediate node with children, it is always null. |
| License Server Host ID L2 | Reference to a License Server Host. It is not null when a node is a leaf level License Server Host node. If a node is an intermediate node with children, it is always null. |

User Details

This query subject describes user detail information.

Table 3-6 • User Details Properties

| Property | Description |
|-----------------------|---|
| User ID | Primary key. |
| User Name | User login ID. |
| First Name | Custom property populated by Organization Structure XML import. |
| Last Name | Custom property populated by Organization Structure XML import. |
| E-mail | Custom property populated by Organization Structure XML import. |
| Phone Number | Custom property populated by Organization Structure XML import. |
| Mobile Number | Custom property populated by Organization Structure XML import. |
| Address 1 | Custom property populated by Organization Structure XML import. |
| Address 2 | Custom property populated by Organization Structure XML import. |
| City | Custom property populated by Organization Structure XML import. |
| Postal Code | Custom property populated by Organization Structure XML import. |
| State/Province | Custom property populated by Organization Structure XML import. |
| Country | Custom property populated by Organization Structure XML import. |
| Department | Custom property populated by Organization Structure XML import. |
| Status | Custom property populated by Organization Structure XML import. |

License Server Host Details

This query subject describes license server host details.

Table 3-7 • License Server Host Details Properties

| Property | Description |
|-------------------------------|--------------|
| License Server Host ID | Primary key. |

Table 3-7 • License Server Host Details Properties

| Property | Description |
|---|-----------------------------------|
| License Server Host Name | License server host name. |
| License Server Host Display Name | License server host display name. |

Project Details

This query subject describes project details.

Table 3-8 • Project Details Properties

| Property | Description |
|-----------------------------|-----------------------|
| Project ID | Primary key. |
| Project Name | Project name. |
| Project Display Name | Project display name. |

Org Level 1 to 3

This query subject describes an organization as a flat structure with three levels of an organization structure hierarchy.

Table 3-9 • Org Level 1 to 3 Properties

| Property | Description |
|-------------------------|---|
| Org Node Name L1 | Organization structure Level 1 Node name. |
| Org Node Name L2 | Organization structure Level 2 Node name. |
| Org Node Name L3 | Organization structure Level 3 Node name. (Usage is defined for this level node.) |
| Org Type Name | Organization structure Type Name. |
| Org Node ID L1 | The organization node ID on Level 1. |
| Start Date L2-1 | The Effective start date (inclusive) of the hierarchy relationship between L2 node and L1 node. |

Table 3-9 • Org Level 1 to 3 Properties

| Property | Description |
|----------------------------------|--|
| End Date L2-1 | The Effective end date (exclusive) of the hierarchy relationship between L2 node and L1 node. |
| Time ID Start L2-1 | Reference to the Effective start date (inclusive) of the hierarchy relationship between L2 node and L1 node. |
| Time ID End L2-1 | Reference to the Effective end date (exclusive) of the hierarchy relationship between L2 node and L1 node. |
| Org Node ID L2 | The org. node ID on Level 2. |
| Start Date L3-2 | The Effective start date (inclusive) of the hierarchy relationship between L3 node and L2 node. |
| End Date L3-2 | The Effective end date (exclusive) of the hierarchy relationship between L3 node and L2 node. |
| Time ID Start L3-2 | Reference to the Effective start date (inclusive) of the hierarchy relationship between L3 node and L2 node. |
| Time ID End L3-2 | Reference to the Effective end date (exclusive) of the hierarchy relationship between L3 node and L2 node. |
| Org Node ID L3 | The org. node ID that is referenced from the Usage query subject. |
| User ID L3 | Reference to a User. It is not null when a node is a leaf level User node. If a node is an intermediate node with children, it is always null. |
| Project ID L3 | Reference to a Project. It is not null when a node is a leaf level Project node. If a node is an intermediate node with children, it is always null. |
| License Server Host ID L3 | Reference to a License Server Host. It is not null when a node is a leaf level License Server Host node. If a node is an intermediate node with children, it is always null. |

Org Level 1 to 4

This query subject describes an organization as a flat structure with four levels of an organization structure hierarchy.

Table 3-10 • Org Level 1 to 4 Properties

| Property | Description |
|-------------------------|---|
| Org Node Name L1 | Organization structure Level 1 Node name. |

Table 3-10 • Org Level 1 to 4 Properties

| Property | Description |
|---------------------------|--|
| Org Node Name L2 | Organization structure Level 2 Node name. |
| Org Node Name L3 | Organization structure Level 3 Node name. |
| Org Node Name L4 | Organization structure Level 4 Node name. (Usage is defined for this level node.) |
| Org Type Name | Organization structure Type Name. |
| Org Node ID L1 | The organization node ID on Level 1. |
| Start Date L2-1 | The Effective start date (inclusive) of the hierarchy relationship between L2 node and L1 node. |
| End Date L2-1 | The Effective end date (exclusive) of the hierarchy relationship between L2 node and L1 node. |
| Time ID Start L2-1 | Reference to the Effective start date (inclusive) of the hierarchy relationship between L2 node and L1 node. |
| Time ID End L2-1 | Reference to the Effective end date (exclusive) of the hierarchy relationship between L2 node and L1 node. |
| Org Node ID L2 | The org. node ID on Level 2. |
| Start Date L3-2 | The Effective start date (inclusive) of the hierarchy relationship between L3 node and L2 node. |
| End Date L3-2 | The Effective end date (exclusive) of the hierarchy relationship between L3 node and L2 node. |
| Time ID Start L3-2 | Reference to the Effective start date (inclusive) of the hierarchy relationship between L3 node and L2 node. |
| Time ID End L3-2 | Reference to the Effective end date (exclusive) of the hierarchy relationship between L3 node and L2 node. |
| Org Node ID L3 | The org. node ID that is referenced from the Usage query subject. |
| Start Date L4-3 | The Effective start date (inclusive) of the hierarchy relationship between L4 node and L3 node. |
| End Date L4-3 | The Effective end date (exclusive) of the hierarchy relationship between L4 node and L3 node. |

Table 3-10 • Org Level 1 to 4 Properties

| Property | Description |
|----------------------------------|--|
| Time ID Start L4-3 | Reference to the Effective start date (inclusive) of the hierarchy relationship between L4 node and L3 node. |
| Time ID End L4-3 | Reference to the Effective end date (exclusive) of the hierarchy relationship between L4 node and L3 node. |
| Org Node ID L4 | The organization node ID that is referenced from the Usage query subject. |
| User ID L4 | Reference to a User. It is not null when a node is a leaf level User node. If a node is an intermediate node with children, it is always null. |
| Project ID L4 | Reference to a Project. It is not null when a node is a leaf level Project node. If a node is an intermediate node with children, it is always null. |
| License Server Host ID L4 | Reference to a License Server Host. It is not null when a node is a leaf level License Server Host node. If a node is an intermediate node with children, it is always null. |

Org Level 1 to 5

This query subject describes an organization as a flat structure with four levels of an organization structure hierarchy.

Table 3-11 • Org Level 1 to 5 Properties

| Property | Description |
|-------------------------|---|
| Org Node Name L1 | Organization structure Level 1 Node name. |
| Org Node Name L2 | Organization structure Level 2 Node name. |
| Org Node Name L3 | Organization structure Level 3 Node name. |
| Org Node Name L4 | Organization structure Level 4 Node name. |
| Org Node Name L5 | Organization structure Level 5 Node name. (Usage is defined for this level node.) |
| Org Type Name | Organization structure Type Name. |
| Org Node ID L1 | The organization node ID on Level 1. |
| Start Date L2-1 | The Effective start date (inclusive) of the hierarchy relationship between L2 node and L1 node. |

Table 3-11 • Org Level 1 to 5 Properties

| Property | Description |
|---------------------------|--|
| End Date L2-1 | The Effective end date (exclusive) of the hierarchy relationship between L2 node and L1 node. |
| Time ID Start L2-1 | Reference to the Effective start date (inclusive) of the hierarchy relationship between L2 node and L1 node. |
| Time ID End L2-1 | Reference to the Effective end date (exclusive) of the hierarchy relationship between L2 node and L1 node. |
| Org Node ID L2 | The org. node ID on Level 2. |
| Start Date L3-2 | The Effective start date (inclusive) of the hierarchy relationship between L3 node and L2 node. |
| End Date L3-2 | The Effective end date (exclusive) of the hierarchy relationship between L3 node and L2 node. |
| Time ID Start L3-2 | Reference to the Effective start date (inclusive) of the hierarchy relationship between L3 node and L2 node. |
| Time ID End L3-2 | Reference to the Effective end date (exclusive) of the hierarchy relationship between L3 node and L2 node. |
| Org Node ID L3 | The org. node ID that is referenced from the Usage query subject. |
| Start Date L4-3 | The Effective start date (inclusive) of the hierarchy relationship between L4 node and L3 node. |
| End Date L4-3 | The Effective end date (exclusive) of the hierarchy relationship between L4 node and L3 node. |
| Time ID Start L4-3 | Reference to the Effective start date (inclusive) of the hierarchy relationship between L4 node and L3 node. |
| Time ID End L4-3 | Reference to the Effective end date (exclusive) of the hierarchy relationship between L4 node and L3 node. |
| Org Node ID L4 | The organization node ID that is referenced from the Usage query subject. |
| Start Date L5-4 | The Effective start date (inclusive) of the hierarchy relationship between L5 node and L4 node. |
| End Date L5-4 | The Effective end date (exclusive) of the hierarchy relationship between L5 node and L4 node. |

Table 3-11 • Org Level 1 to 5 Properties

| Property | Description |
|----------------------------------|--|
| Time ID Start L5-4 | Reference to the Effective start date (inclusive) of the hierarchy relationship between L5 node and L4 node. |
| Time ID End L5-4 | Reference to the Effective end date (exclusive) of the hierarchy relationship between L5 node and L4 node. |
| Org Node ID L5 | The organization node ID that is referenced from the Usage query subject. |
| User ID L5 | Reference to a User. It is not null when a node is a leaf level User node. If a node is an intermediate node with children, it is always null. |
| Project ID L5 | Reference to a Project. It is not null when a node is a leaf level Project node. If a node is an intermediate node with children, it is always null. |
| License Server Host ID L5 | Reference to a License Server Host. It is not null when a node is a leaf level License Server Host node. If a node is an intermediate node with children, it is always null. |

Usage (Leaf Level-Based)

This query subject describes usage facts on the leaf level (not organization structure based).

Table 3-12 • Usage Properties

| Property | Description |
|----------------------------------|---|
| Usage Events | Number of licenses in use at the time referenced by TIME_ID. |
| Ultimate Denials | Total number of "true" denials during 1 month beginning at the time point referenced by TIME_ID. A true denial is an ultimate denial or folded denial, based on the configured false denials interval. |
| Peak Licenses | Peak number of licenses in use during one month beginning at the time point referenced by TIME_ID. |
| Total Time Used (hours) | Calculated cumulative time a license has been used during this month in hours. For example, 2 licenses in use during 1 hour would result in 2 hours of total use time. |
| Total Time Used (seconds) | Calculated cumulative time a license has been used during this month in seconds. For example 2 licenses in use during 1 hour would result in 172,800 seconds of total use time. |
| User ID | Reference to User. |

Table 3-12 • Usage Properties

| Property | Description |
|-------------------------------|-----------------------------------|
| Project ID | Reference to Project. |
| Feature ID | Reference to Feature. |
| License Server Host ID | Reference to License Server Host. |
| Time ID | Reference to Time. |

Availability

This query subject describes a feature availability for a Feature, Time on a License Server Host.

Table 3-13 • Availability Properties

| Property | Description |
|---------------------------------|---|
| Availability Max Count | Maximum available count of a feature's licenses within a given month. |
| Available Time (hours) | Calculated cumulative time a license has been available during this month in hours. For example, 2 licenses were available during 24 hours would result in 48 hours of total available time. |
| Available Time (seconds) | Calculated cumulative time a license has been available during this month in hours. For example, 2 licenses were available during 24 hours would result in 172,800 seconds of total available time. |
| Time ID | Reference to Time. |
| Feature ID | Reference to Feature. |
| License Server Host ID | Reference to License Server Host. |

Product-Producer-Month/Day/Hour

Describes all the given Products with their Producers known for each month on the Time line. The properties available will vary depending on the query subject.

Table 3-14 • Feature-Vendor-Month properties

| Property | Description |
|-----------------------------------|--|
| Producer | Producer name. |
| Product Name | Product name. |
| Product Version | Product version. |
| Product Number | Product number. |
| Year | Year. |
| Month Num | Month number. For December, this would be 12. |
| Month | Month name. For example, December. |
| Time ID | Reference to the first day of a month in the Time Dimension query subject. |
| Product ID | Reference to a Product. |
| Software Producer ID | Reference to a Software Producer of a Feature. |
| Product Category | Product category. |
| Product Family | Product family. |
| Product Notes | Product notes. |
| Software Producer Category | Software producer category. |
| Software Producer Notes | Software producer notes. |
| Quarter | Quarter number. |
| Quarter Name | Quarter name. |
| Date (1st of Month) | First date of a month. |
| Month of Quarter | Whether the month is the first, second, or third in a given quarter. |

Operational Data

The Operational Data query subjects are divided into two namespaces, [Feature Real Time \(by Server\)](#), and [Feature Real Time \(Servers Combined\)](#), which provides the usage data from the first namespace aggregated slightly so that usage from multiple license servers has been combined, which is necessary to get accurate peak usage numbers for features that are served by more than one license server.

Both namespaces have data by the minute, which is the most granular data as collected by the agent, and then aggregated into hourly and daily values.

The Servers Combined namespace also includes a folder with query subjects that represent lists of top features used, by their utilization percentage. The same values could be derived by the other existing query subjects, but accessing them through these lists provides better performance, which is desirable for the Operational Dashboard.

Unlike the familiar aggregation of historical data, the aggregation for the Servers Combined hourly and daily data, and for combining usage from multiple servers, is done implicitly as part of the data connection; no extra step is necessary.

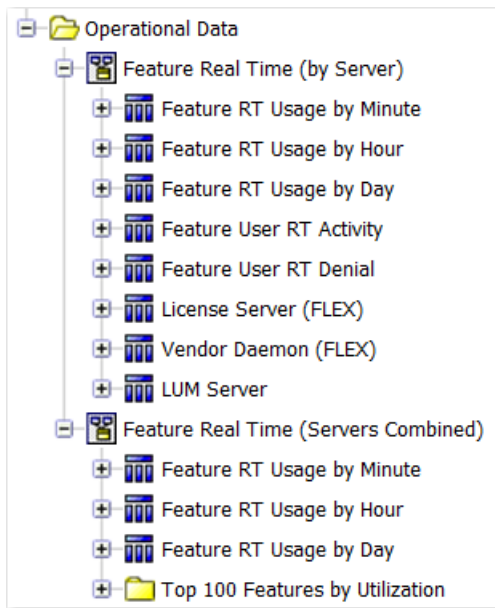


Figure 3-11: Operational Data folders expanded to show the levels and query subjects (in Query Studio)

Feature Real Time (by Server)

This namespace contains data that reflects all of the current usage data as it is collected from the individual license servers. It contains the following query subjects:

- [Feature RT Usage by Minute](#)—This is the feature usage data retrieved by the agent in its most raw form. Usage levels for each feature are recorded by the minute.
- [Feature RT Usage by Hour](#)—Same as Feature RT Usage by Minute, except that the data has been aggregated so that a single record represents all usage for a given feature (from one license server) during one hour.

- [Feature RT Usage by Day](#)—Same as Feature RT Usage by Hour, except that the data has been aggregated so that a single record represents all usage for a given feature (from one license server) during one entire day.
- [Feature User RT Activity](#)—Represents all the users that had any feature checked out at the last time data was gathered. This can be used to identify which users are currently using a feature, and determine how long they have had these licenses checked out.
- [Feature User RT Denial](#)—Represents denials to license checkout requests, and which users received them.
- [License Server \(FLEX\)](#)—Status information about individual FlexNet license servers.
- [Vendor Daemon \(FLEX\)](#)—Status information about individual FlexNet vendor daemons.
- [LUM Server](#)—Status information about individual LUM servers.

Feature Real Time (Servers Combined)

This namespace provides the usage data from the first namespace—[Feature Real Time \(by Server\)](#)—aggregated slightly so that usage from multiple license servers has been combined. This is necessary to get accurate peak usage numbers for features that are served by more than one license server. It contains the following query subjects:

- [Feature RT Usage by Minute](#)—Usage levels for each feature are recorded by the minute, combined across all license servers.
- [Feature RT Usage by Hour](#)—Same as Feature RT Usage by Minute, except that the data has been aggregated so that a single record represents all usage for a given feature (from all license servers) during one hour.
- [Feature RT Usage by Day](#)—Same as Feature RT Usage by Hour, except that the data has been aggregated so that a single record represents all usage for a given feature (from all license servers) during one entire day.

Top 100 Features by Utilization

The query subjects in this folder represent the top 100 features, in terms of their utilization percentage (maximum licenses used / available licenses). The following query subjects are available:

- [Top Feature Usage \(Last 30 Minutes\)](#)
- [Top Feature Usage \(Last Hour\)](#)
- [Top Feature Usage \(Last 2 Hours\)](#)
- [Top Feature Usage \(Last Day\)](#)
- [Top Feature Usage \(Last 3 Days\)](#)
- [Top Feature Usage \(Overall\)](#)


Operational Data Query Subjects

The query subjects described in this section apply only to the Operational Data folder.

Feature RT Usage by Minute/Hour/Day

The properties apply to the Feature RT Usage by Minute/Hour/Day query subjects found in both Feature Real Time (by Server) and Feature Real Time (Servers Combined). The data presented for Feature Real Time (Servers Combined) represents the combined usage from all license servers that serve the feature.

Table 3-15 • Feature RT Usage by Minute/Hour/Day Properties

| Property | Description |
|--------------------------------|---|
| Date | <ul style="list-style-type: none"> by Minute—Timestamp indicating when the data was collected. by Hour—Timestamp representing the start of the hour represented (ex. 4/5/2011 13:00:00 indicates this record is representing usage from 1:00pm to 1:59pm on April 5). by Day—Timestamp representing the start of the day (midnight) represented. |
| Feature Name | Name of the feature. |
| License Server Host | <p>Name of the host of the license server that served this feature.</p>  <p>Note • This property is not part of the Feature RT Usage by Minute/Hour/Day query subject that is in Feature Real Time (Servers Combined).</p> |
| Vendor Name | Name of the vendor for this feature. |
| Licensing System | Licensing system used to serve this feature: FLEX or LUM. |
| Licenses in Use | <ul style="list-style-type: none"> by Minute—The number of licenses that were in use (checked out) for this feature at the time the data was collected (Date). by Hour—Not applicable. by Day—Not applicable. |
| Maximum Licenses in Use | <ul style="list-style-type: none"> by Minute—Not applicable. by Hour—The maximum or peak number of licenses that were in use simultaneously during this hour, for this feature. by Day—The maximum or peak number of licenses that were in use simultaneously during this day, for this feature. |
| Licenses Available | <ul style="list-style-type: none"> by Minute—Number of licenses available at the time when the data was collected (Date). by Hour—The maximum number of licenses available simultaneously during this hour. by Day—The maximum number of licenses available simultaneously during this day. |

Feature User RT Activity

Table 3-16 • Feature User RT Activity Properties

| Property | Description |
|----------------------------|--|
| Date | The timestamp indicating when this data was collected, meaning that at this time, the user had the feature checked out. There should never be more than one record per combination user, user host, vendor, feature, version, and license server host. |
| Feature Name | Name of the feature. |
| Feature Version | Version of the feature in use. |
| License Server Host | Name of the host of the license server that served this feature. |
| Vendor Name | Name of the vendor for this feature. |
| Licensing System | Licensing system used to serve this feature: FLEX or LUM. |
| User Name | The user that is currently using this feature. |
| User Host | Name of the host machine from which the user is accessing this feature. |
| Licenses in Use | The number of licenses the user currently has checked out for this feature. |
| Elapsed Time | The time elapsed since the user first checked out the licenses for this feature. This field can be used to identify users that may have checked out features for an unexpectedly long time, and perhaps should be able to check in and free up these licenses. |

Feature User RT Denial

Table 3-17 • Feature User RT Denial Properties

| Property | Description |
|----------------------------|---|
| Date | The timestamp indicating when this data was collected. |
| Feature Name | Name of the feature. |
| Feature Version | Version of the feature in use. |
| License Server Host | Name of the host of the license server that received the feature use request and issued the denial. |
| Vendor Name | Name of the vendor for this feature. |

Table 3-17 • Feature User RT Denial Properties

| Property | Description |
|-------------------------|--|
| Licensing System | Licensing system used to serve this feature: FLEX or LUM. |
| User Name | The user that requested the feature and received the denial. |
| User Host | Name of the host machine from which the user was attempting to access the feature. |
| Denial Count | Number of licenses requested. |
| Reason Code | Code indicating the reason for the denial. A value of -4 indicates that all available licenses are already in use. |

License Server (FLEX)

Table 3-18 • License Server (FLEX) Properties

| Property | Description |
|-------------------------|--|
| ID | An identifier number. |
| Name | Name of the FlexNet license server. |
| Server Host Name | Name of the host where the FlexNet license server is running. |
| Status | Value indicating the status of the license server. <ul style="list-style-type: none"> • 180 = Up • 170 = Manageable and Up • 160 = Rereading • 150 = Starting • 140 = Stopping • 130 = Unknown • 100 = Down |
| Last Update Date | Timestamp indicating when this data was collected. |

Vendor Daemon (FLEX)

Table 3-19 • Vendor Daemon (FLEX) Properties

| Property | Description |
|--------------------------|---|
| Name | Name of the vendor daemon. |
| Status | Value indicating the status of the vendor daemon. <ul style="list-style-type: none"> • 180 = Up • 170 = Manageable and Up • 160 = Rereading • 150 = Starting • 140 = Stopping • 130 = Unknown • 100 = Down |
| ID | An identifier number. |
| License Server ID | ID of the FlexNet license server. This maps to the ID field of License Server (FLEX). |

Table 3-19 • Vendor Daemon (FLEX) Properties

| Property | Description |
|-------------------------|--|
| Last Update Date | Timestamp indicating when this data was collected. |

LUM Server

Table 3-20 • LUM Server Properties

| Property | Description |
|-------------------------|--|
| ID | An identifier number. |
| Name | Name of the LUM server. |
| Server Host Name | Name of the host where the LUM server is running. |
| Vendor | Name of the vendor for this LUM server. |
| Status | Value indicating the status of the LUM server. <ul style="list-style-type: none"> • 180 = Up • 170 = Manageable and Up • 160 = Rereading • 150 = Starting • 140 = Stopping • 130 = Unknown • 100 = Down |
| Last Update Date | Timestamp indicating when this data was collected. |
| Creation Date | Timestamp indicating when this LUM server was added to FlexNet Manager for Engineering Applications |

Top Feature Usage (*time period*)

The Top 100 Features by Utilization folder contains multiple Top Feature Usage query subjects, each of which applies to a different time period (for example, Last 2 Hours). The properties described in the following table apply to all of the Top Feature Usage query subjects.

Table 3-21 • Top Feature Usage (*time period*) Properties

| Property | Description |
|---------------------|----------------------|
| Feature Name | Name of the feature. |

Table 3-21 • Top Feature Usage (*time period*) Properties

| Property | Description |
|----------------------------|--|
| Vendor Name | Name of the vendor. |
| Licensing System | Licensing system used to serve this feature: FLEX or LUM. |
| Maximum Utilization | Maximum percentage of licenses used for the given time period: licenses in use / availability |

Report Designer Reports for Package 3

You access Report Designer reports using the Report Designer tab beneath the Reports tab in the FlexNet Manager for Engineering Applications interface.



Task: *To access the predefined reports for Package 3:*

1. In the FlexNet Manager for Engineering Applications user interface, click the **Report Designer** tab, then click the **Custom Reporting** link on the left side of the screen.
2. In the Cognos Connection pane, click the **FNMReporting** folder to open it.
3. On the next screen, click the **FlexNet Reports** folder.



Note • *These predefined reports are available only if you have Report Designer Package 3 installed.*

The following predefined reports are available for Package 3:

- [Aggregation History Report](#)
- [Data Warehouse Dashboard Report](#)
- [Feature Chargeback Report](#)
- [Feature Usage Report](#)
- [Feature Usage Report \(Previous Month\)](#)
- [Feature Usage Report \(by Month\)](#)
- [Geographic Feature Usage Report](#)
- [Organization Peak Usage by Feature Report](#)
- [Usage Summary Report by Organization](#)

- Product Chargeback Report
- Product Daily Peak Usage Report
- Feature Peak Usage by Product Report
- Product Peak Usage Report
- Product Peak Usage Occurrences Report
- Product Peak Usage Trend (Remix) Report

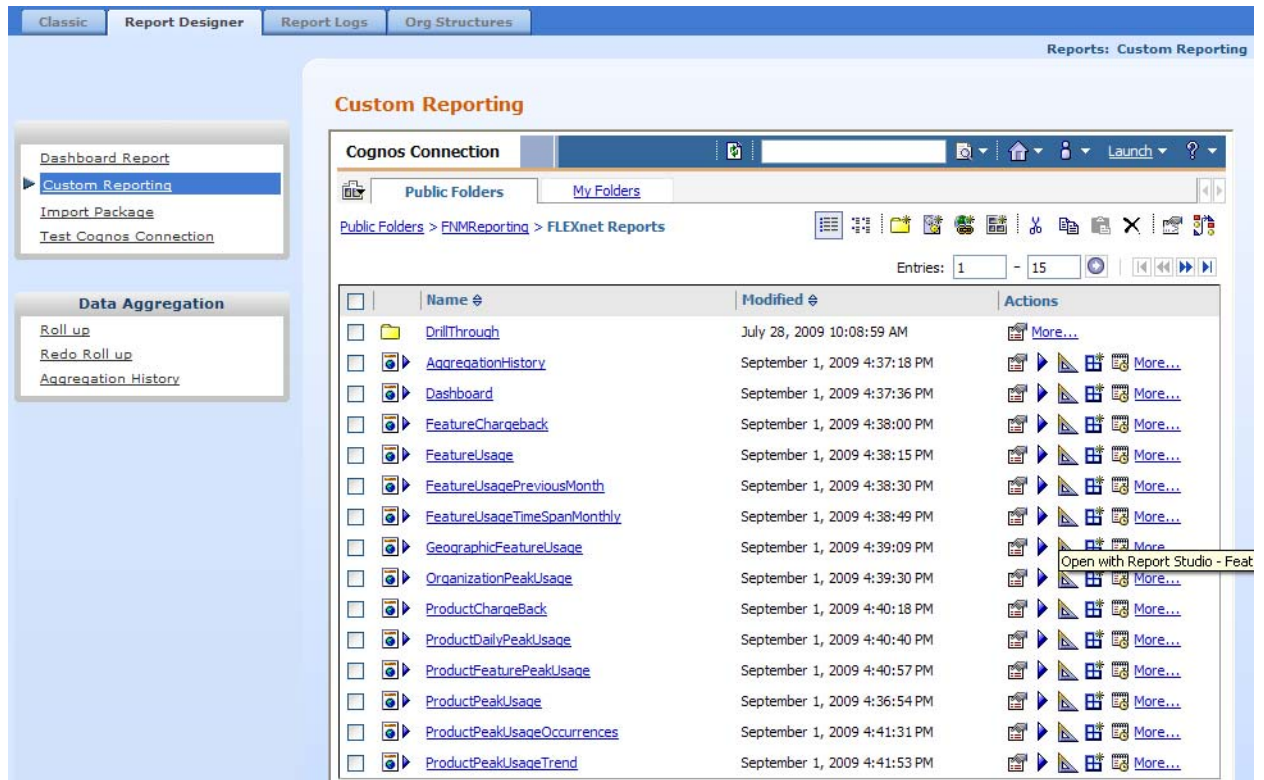


Figure 4-1: FlexNet Reports in Report Designer

To run a basic version of a report, click the report name. You will be shown the parameters you can set via drop-down menus (except for the Aggregation History Report, and Dashboard Report, which do not require you to tailor them), as well as the option to view a description of the report including explanations of the parameters.

You can perform a number of other actions on each report, which are shown to the right of the report name. You can select the following:

- Set properties
- Run with options
- Open with Report Studio
- Create a report view of this report

- Schedule

Aggregation History Report

This report uses a table to display the Task ID, Status, Start Time, Last Commit Time, and Last Modified time of aggregations you have performed.

Aggregation History

| Task ID | Status | Start Time (GMT) | Last Commit Time (GMT) | Last Modified (GMT) |
|---------|-------------|-------------------------|-------------------------|-------------------------|
| 1 | Complete | Nov 19, 2008 8:00:32 PM | Nov 19, 2008 8:01:27 PM | Nov 19, 2008 8:01:27 PM |
| 2 | In Progress | Nov 19, 2008 8:05:18 PM | | Nov 19, 2008 8:05:18 PM |

Figure 4-2: Aggregation History report

Data Warehouse Dashboard Report

The Data Warehouse Dashboard report provides you with data on the Last Aggregation, Time Span, and the number of Log Files, Features, Users, Server Hosts, Vendors, Organizations, and Organizational Nodes.

Data Warehouse Dashboard

| | |
|---------------------------------|---|
| Last Aggregation (GMT): | Dec 2, 2007 5:35:00 PM |
| Time Span: | Wednesday, October 4, 2006 - Sunday, December 2, 2007 |
| Number of Log Files: | 10,948 |
| Number of Features: | 640 |
| Number of Users: | 3,266 |
| Number of Server Hosts: | 22 |
| Number of Vendors: | 37 |
| Number of Organizations: | 5 |
| Number of Organizational Nodes: | 4,132 |

Figure 4-3: Data Warehouse Dashboard report

Feature Chargeback Report

The Feature Chargeback report displays a summary of feature usage by organizational unit for a specified time period, along with the organizational unit's total cost of using each feature and the organizational unit's overall total cost for the time period. The report also provides a summary of the total hours used for all specified features and the total cost for all specified features during the time period.

Within the report, you can drill through the hierarchical levels in your organizational structure, eventually arriving at per-user data.

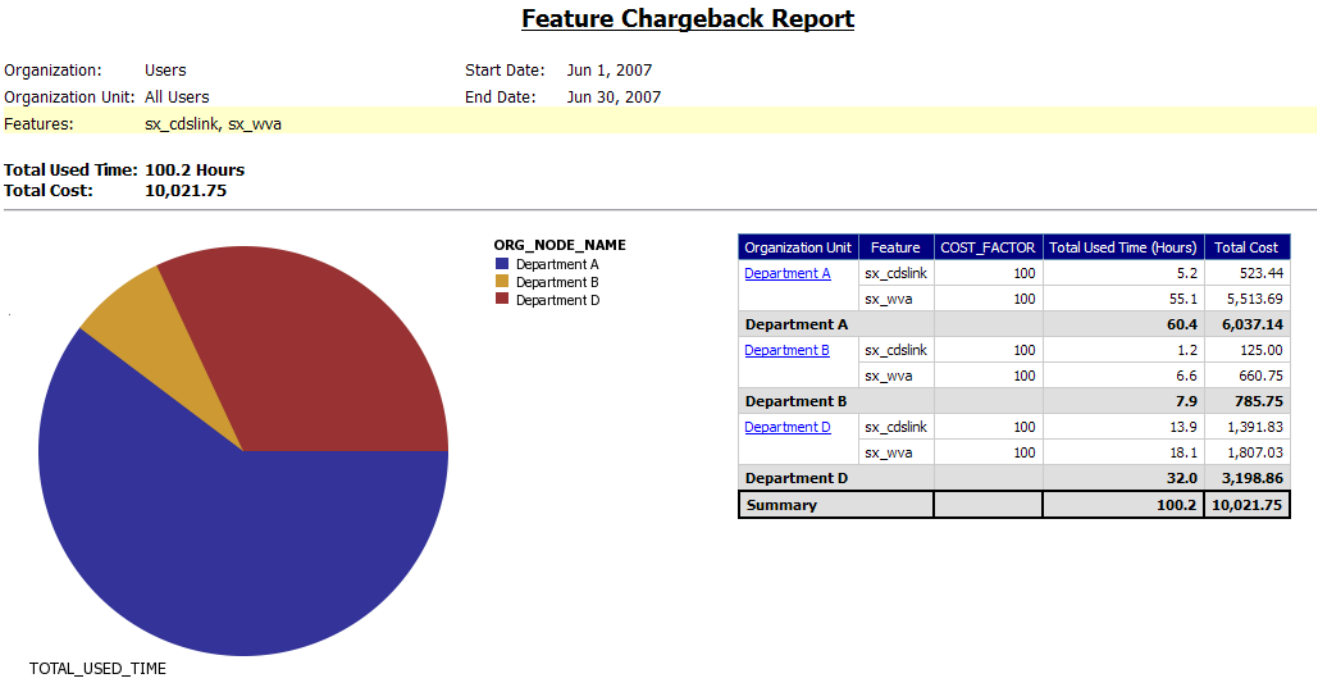


Figure 4-4: Feature Chargeback report

Feature Usage Report



This report displays feature usage, and compares the time used to the time the feature was available. The report spans the entire time period represented in the data, with the ability to drill down to more specific time periods.

Feature Usage Report



Vendor: magma

Feature(s): BLAST_BUILDER, BLAST_CREATE, BLAST_FUSION_APX, BLAST_PLAN, BLAST_PLANPRO, BLAST_PLANSVP, BLAST_POWER, BLAST_RAIL, BLAST_SI, BLAST_SPEED, BLAST_VIEW, BLAST_WRAP, QUARTZ_RC, QUARTZ_TIME, QUICKRULES

BLAST_SPEED

| Year | AVAILABILITY | Server Host | Maximum Licenses Available | Available Time (seconds) | Total Used Time (seconds) | Percentage Used | Gauge |
|-------------|--------------|-------------|----------------------------|--------------------------|---------------------------|-----------------|---|
| 2007 | 2 | licwan | 2 | 518,400 | 107,905 | 20.82% |  |
| BLAST_SPEED | | | 2 | 518,400 | 107,905 | 20.82% |  |

BLAST_BUILDER

| Year | AVAILABILITY | Server Host | Maximum Licenses Available | Available Time (seconds) | Total Used Time (seconds) | Percentage Used | Gauge |
|---------------|--------------|-------------|----------------------------|--------------------------|---------------------------|-----------------|---|
| 2007 | 2 | licwan | 2 | 518,400 | 99,627 | 19.22% |  |
| BLAST_BUILDER | | | 2 | 518,400 | 99,627 | 19.22% |  |

BLAST_FUSION_APX


| Year | AVAILABILITY | Server Host | Maximum Licenses Available | Available Time (seconds) | Total Used Time (seconds) | Percentage Used | Gauge |
|------|--------------|-------------|----------------------------|--------------------------|---------------------------|-----------------|---|
| 2007 | 2 | licwan | 2 | 518,400 | 88,380 | 17.05% |  |

Figure 4-5: Feature Usage report

Feature Usage Report (Previous Month)

This report displays feature usage, and compares the time used to the time the feature was available. The report is similar to the Feature Usage Report (Figure 4-5), except it is limited to data from the previous month, making it ideal for running on a scheduled (monthly) basis.

Feature Usage Report (by Month)

This report displays feature usage, and compares the time used to the time the feature was available. The report is similar to the Feature Usage Report (Figure 4-5), except that the time span is limited by a start and end date, giving the ability to report on a specific period of time. Data is aggregated by month, with the ability to drill down for more specific results.

Geographic Feature Usage Report

This report displays feature usage divided among the individual states of the United States.

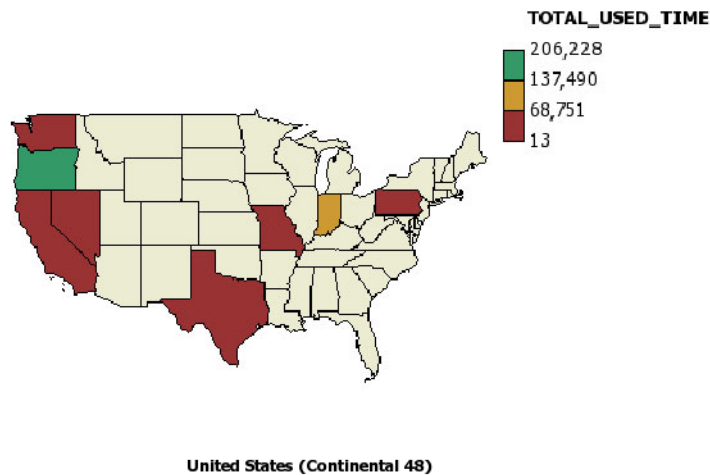


Figure 4-6: Geographic Feature Usage report

Organization Peak Usage by Feature Report

This report displays feature usage by individual units of an organization. The report spans the entire time period represented in the data, with the ability to drill down to more specific time periods and organizational units.

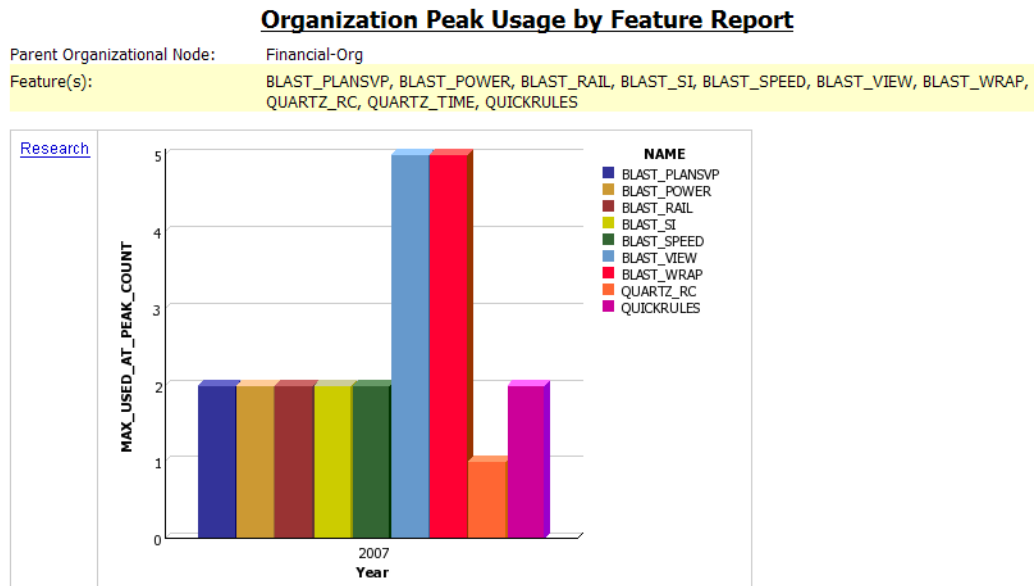


Figure 4-7: Organization Peak Usage by Feature report

Usage Summary Report by Organization

This report summarizes the amount of time each feature has been used by individual units in your organization.

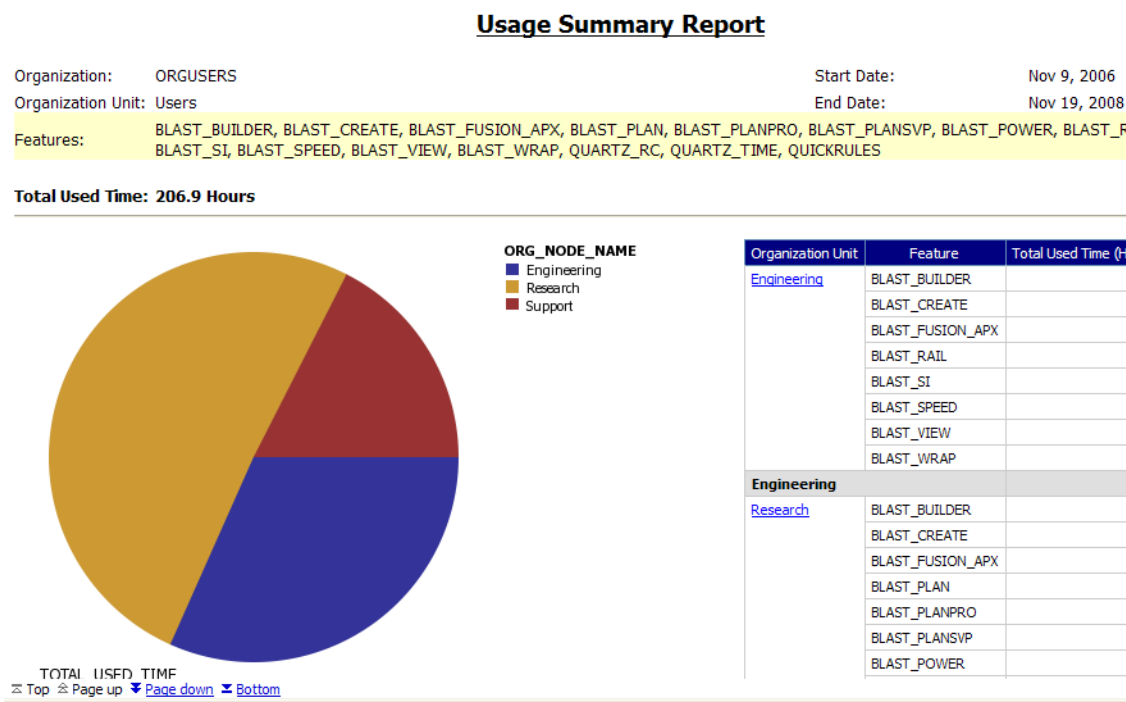


Figure 4-8: Usage Summary by Organization report

Product Chargeback Report

This report, which is part of FlexNet Manager for Engineering Applications's investment-planning functionality, summarizes the product usage by individual organizational units in your enterprise and calculates a monetary value for that usage.

Product Chargeback Report

Product: CD Product Start Date: January, 2007 - February, 2007
Software Producer: CT_SP1
Organization: Users
Measure: Peak Concurrent Usage
Monthly Cost: 24,375

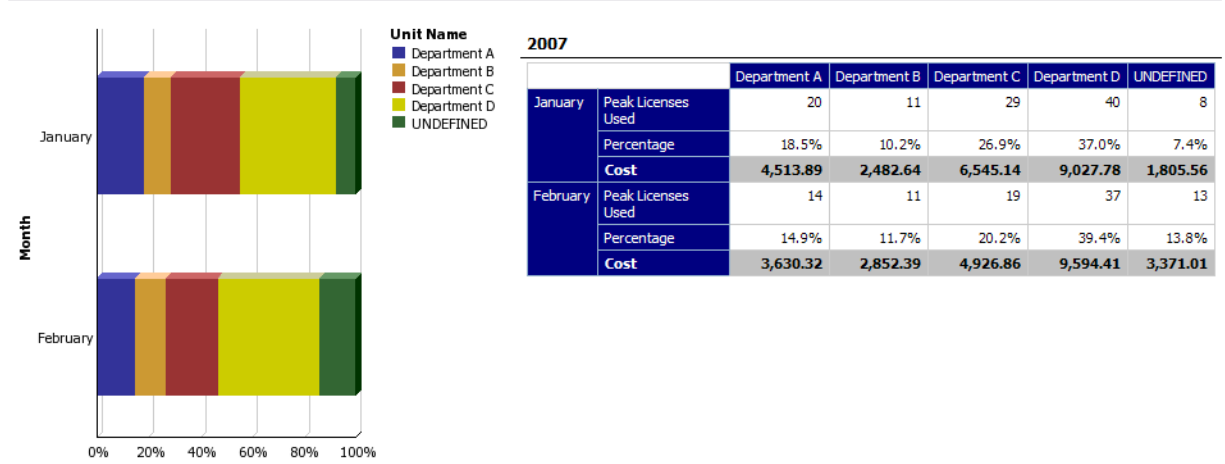


Figure 4-9: Product Chargeback report

Product Daily Peak Usage Report

This report, which is part of FlexNet Manager for Engineering Applications's investment-planning functionality, shows the daily peak usage for selected products. You specify the time period for which you want to see usage and whether the report should display absolute product usage values or product usage as a percentage of available licenses.

Product Daily Peak Usage Report

Organization: All Users Usage Start Date: Dec 28, 2006
Product: CD Product Usage End Date: Jan 27, 2007
Chart Type: Bar Chart
Measure: Absolute Peak Values

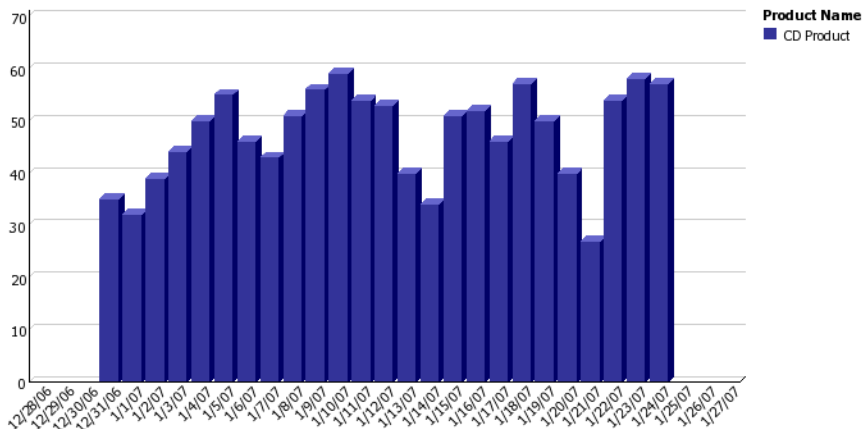


Figure 4-10: Product Daily Peak Usage report

Feature Peak Usage by Product Report

This report, which is part of FlexNet Manager for Engineering Applications’s investment-planning functionality, shows the peak usage for a specified feature, categorized by the product or products to which that usage was mapped. You can use this report as a guide for determining which products a shared feature is more likely to be assigned to.

Feature Peak Usage by Product Report

Organization: All Users
Feature: Affirma_sim_analysis_env

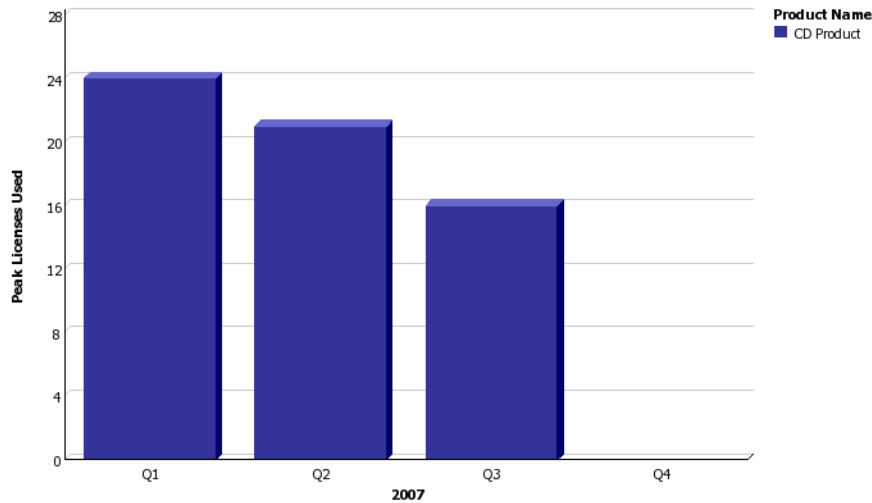


Figure 4-11: Feature Peak Usage by Product report

Product Peak Usage Report

This report, which is part of FlexNet Manager for Engineering Applications's investment-planning functionality, shows the peak usage for selected products. The first view of the report displays peak usage by year. Drill-through functionality enables you to see peak usage by quarters, months, days, and then hours.

Product Peak Usage Report

Organization: All Users Chart Type: Bar Chart
Product(s): CD Product Measure: Absolute Peak Values

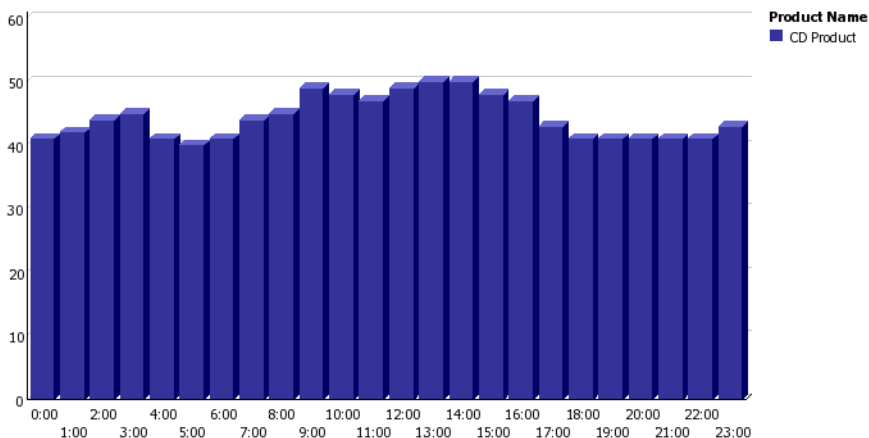


Figure 4-12: Product Peak Usage report

Product Peak Usage Occurrences Report

This report is part of FlexNet Manager for Engineering Applications's investment-planning functionality. Similar to a report provided by LinkRight Tracker, the Product Peak Usage Occurrences report displays a bar chart that indicates the number of occurrences for each peak usage value for a product during a specified time period. This provides a histogram of peak usage values.

Product Peak Usage Occurrences Report

Organization: All Users Usage Start Date: Dec 21, 2006
Product: CD Product Usage End Date: Jan 31, 2007

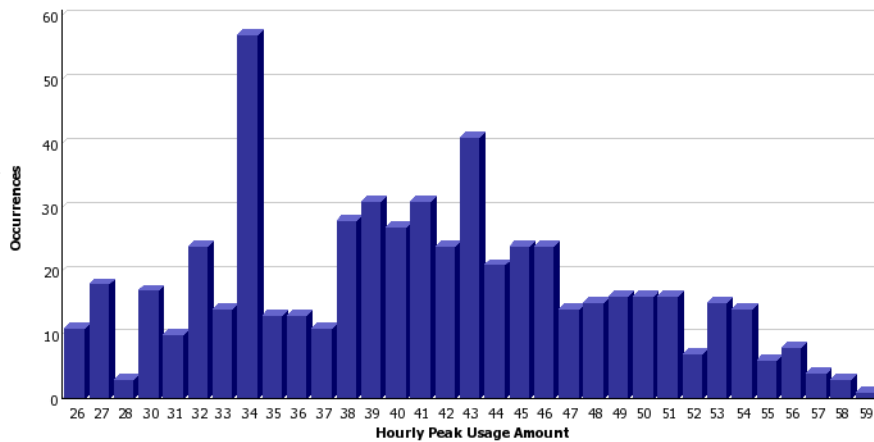


Figure 4-13: Product Peak Usage Occurrences report

Product Peak Usage Trend (Remix) Report

This report is part of FlexNet Manager for Engineering Applications's investment-planning functionality. The Product Peak Usage Trend report displays peak product usage for each day in a specified time period, and uses that usage to draw a trend line that continues to a specified point in the future. A second trend line, parallel to the first, is drawn, elevated by the number of licenses required to keep the peak usage always beneath the trend line.

The purpose of this report is to accompany a remix, although it can be run independently.

Product Peak Usage Trend Report

Organization: All Users Usage Start Date: Jan 1, 2007
Product: CD Product Usage End Date: Jan 20, 2007
Trend End Date: Jan 31, 2007

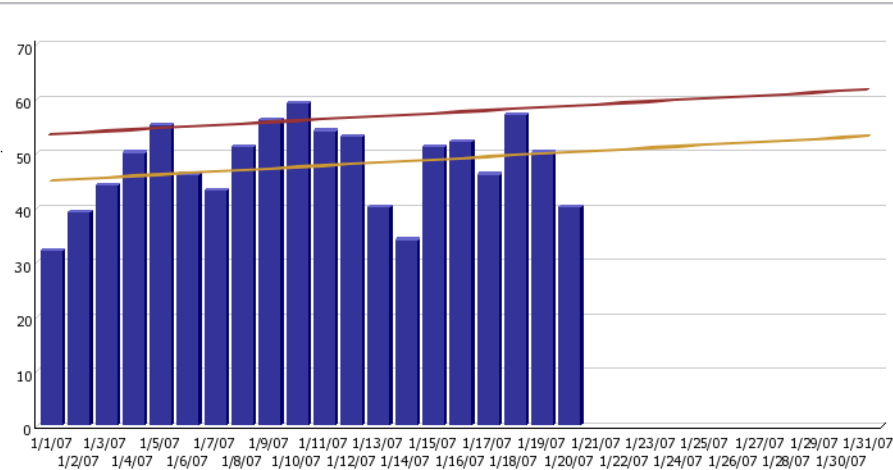


Figure 4-14: Product Peak Usage Trend (Remix) report

Organization Peak Usage Summary Report

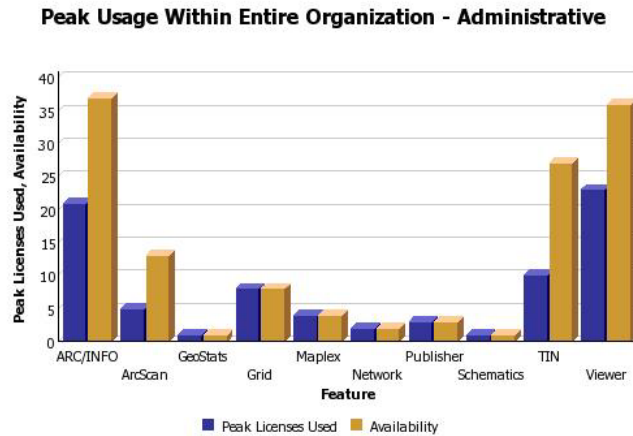
This report is part of FlexNet Manager for Engineering Applications's investment-planning functionality. The Organization Peak Usage Summary report displays feature usage for the entire organization, and for the individual units within an organization, as defined using FlexNet Manager for Engineering Applications's Organizational Structures functionality. (See Organizational Structures in the FlexNet Manager for Engineering Applications online help library for information.)

The first view of the report displays peak usage for the entire organization. Drill-through functionality enables you to see peak usage by specific organizational units (as defined using the Organizational Structures functionality available in FlexNet Manager for Engineering Applications).

The report spans a specified time period, and has the ability to drill down to specific organizational units.

Peak Usage Summary Report

Organization: Entire Organization - Administrative Start Date: Jan 1, 2010
 Organization Unit: Entire Organization - Administrative End Date: Mar 10, 2010
 Features: ARC/INFO, ArcPress, ArcScan, DataReViewer, Foundation, GeoStats, Grid, Maplex, Network, Plotting, Publisher, Schematics, TIFFLZW, TIN, Viewer, VirtualEarth



Peak Usage Within Sub-Units:

| Unit Name | Feature | Peak Licenses Used | Availability | Percentage Used |
|-------------|------------|--------------------|--------------|-----------------|
| Austria | Publisher | 2 | 3 | 66.7% |
| | Network | 1 | 2 | 50.0% |
| | Grid | 2 | 8 | 25.0% |
| | Maplex | 1 | 4 | 25.0% |
| | ARC/INFO | 5 | 37 | 13.5% |
| | Viewer | 3 | 36 | 8.3% |
| | TIN | 2 | 27 | 7.4% |
| New Zealand | Grid | 1 | 8 | 12.5% |
| | TIN | 1 | 27 | 3.7% |
| | Viewer | 1 | 36 | 2.8% |
| | ARC/INFO | 1 | 37 | 2.7% |
| Norway | Publisher | 1 | 3 | 33.3% |
| | Grid | 1 | 8 | 12.5% |
| | Viewer | 4 | 36 | 11.1% |
| | ARC/INFO | 2 | 37 | 5.4% |
| | TIN | 1 | 27 | 3.7% |
| Pakistan | Viewer | 2 | 36 | 5.6% |
| | ARC/INFO | 1 | 37 | 2.7% |
| Romania | GeoStats | 1 | 1 | 100.0% |
| | Schematics | 1 | 1 | 100.0% |

Figure 4-15: Peak Usage Summary report

Report Designer Reporting Data Model for Package 3

The Report Designer Package 3 reporting data model includes three views that represent subsets of the data model that are focused on specific areas of reporting: Feature Usage, Product Usage, and Product-Feature Usage (illustrating the relationship between features and the products to which they are mapped). Each of these views can make it more convenient to find the data elements that matter most.

Depending on the type of usage being reported, the appropriate view should provide all that is needed to generate a report, without requiring you to sift through the rest of the data model. The entire data model is still present if a more complete view of the data is required for a specific report.

When designing reports using the Cognos Report Studio (available from the Report Designer tab in the FlexNet Manager for Engineering Applications interface), you can select elements from the Report Designer data model to use in your custom reports.



Note • For custom report creation, it is recommended that you use the simplified Data Model (in the Models folder when using Report Studio) rather than the Data Warehouse.

Measure (Fact) Tables

Feature Leaf Usage Facts

This table stores various facts about feature license usage with hourly breakdown for a specific LEAF (defined as a unique combination of USER, PROJECT, and SERVER_HOST).

Applicable Tables

- Data Warehouse.RPTDW_HOURLY_MEASURE_LEAF

- Feature Leaf Usage Model View.Feature Leaf Usage Facts

Table 5-1 • Feature Leaf Usage Facts


| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|--|
| SERVER_HOST_ID | License Server Host ID | Reference to license server host. |
| USER_ID | User ID | Reference to user. |
| PROJECT_ID | Project ID | Reference to Project ID. |
| FEATURE_ID | Feature ID | Reference to Feature. |
| TIME_ID | Time ID | Reference to Time. |
| USED_COUNT | Usage Events | Number of licenses referenced in CHECKOUT events found during the hour referenced by TIME_ID. |
| DENIED_COUNT | Denials | Number of denials (excluding ultimate denials) found during the hour referenced by TIME_ID. |
| UNSUPPORTED_COUNT | Unsupported Events | Reserved for future use. Currently always set to zero. |
| QUEUED_COUNT | Queued Events | Total number of queued events during the hour referenced by TIME_ID. |
| ULTIMATE_DENIAL_COUNT | Ultimate Denials | <p>Total number of “true” denials during the hour referenced by TIME_ID.</p>  <p>Note • A true denial is an ultimate denial or folded denial based on the configured false denials interval.</p> |
| MAX_USED_AT_PEAK_COUNT | Peak Licenses Used | Maximum number of licenses used concurrently in the hour referenced by TIME_ID. |
| TIME_AT_PEAK | Peak Time | Point in time where MAX_USED_AT_PEAK_COUNT concurrent usage first occurred within the hour referenced by TIME_ID. |
| TOTAL_USED_TIME | Total Used Time | Calculated cumulative time a license has been used during this hour. For example, 2 licenses in use during 1 hour would result in 2 hours of total used time. |
| TOTAL_DENIED_TIME | Total Denied Time | Reserved for future use. Currently always set to zero. |

Table 5-1 • Feature Leaf Usage Facts

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|--|
| TOTAL_QUEUED_TIME | Total Queued Time | Total time a license was in the queue during this 1 hour. |
| AVERAGE_USED_TIME | Average Used Time | Total Used Time divided by Usage Events. |
| (N/A) | Availability | Number of licenses for feature that are available from the license server specified by SERVER_HOST_ID during the hour referenced by TIME_ID. |

Feature Usage Facts

This table stores various facts about feature license usage with hourly breakdown for organization units.


Applicable Tables

- Data Warehouse.RPTDW_HOURLY_MEASURE_ORG
- Features Model View.Feature Usage Facts

Table 5-2 • Feature Usage Facts

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---|
| FEATURE_ID | Feature ID | Reference to Feature. |
| ORG_UNIT_ID | OrgUnit ID | Reference to Organization Unit. |
| TIME_ID | Time ID | Reference to Time. |
| USED_COUNT | Usage Events | Number of CHECKOUT events found during the hour referenced by TIME_ID. |
| DENIED_COUNT | Denials | Number of denials (excluding ultimate denials) found during the hour referenced by TIME_ID. |
| UNSUPPORTED_COUNT | Unsupported Events | Reserved for future use. Currently always set to zero. |
| QUEUED_COUNT | Queued Events | Total number of queued events during the hour referenced by TIME_ID. |

Table 5-2 • Feature Usage Facts

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|--|
| ULTIMATE_DENIAL_COUNT | Ultimate Denials | <p>Total number of “true” denials during the hour referenced by TIME_ID.</p>  <p>Note • A true denial is an ultimate denial or folded denial based on the configured false denials interval.</p> |
| MAX_USED_AT_PEAK_COUNT | Peak Licenses Used | Maximum number of licenses used concurrently in the hour referenced by TIME_ID. |
| TIME_AT_PEAK | Peak Time | Point in time where MAX_USED_AT_PEAK_COUNT concurrent usage first occurred within the hour referenced by TIME_ID. |
| TOTAL_USED_TIME | Total Used Time | Calculated cumulative time a license has been used during this hour. For example, 2 licenses in use during 1 hour would result in 2 hours of total used time. |
| TOTAL_DENIED_TIME | Total Denied Time | Reserved for future use. Currently always set to zero. |
| TOTAL_QUEUED_TIME | Total Queued Time | Total time a license was in the queue during this 1 hour. |
| AVERAGE_USED_TIME | Average Used Time | Total Used Time divided by Usage Events. |
| (N/A) | Availability | Number of licenses for the feature that are available during the hour referenced by TIME_ID. |

Product Usage Facts

This table stores various facts about product license usage with hourly breakdown for organization units.

Applicable Tables

- Data Warehouse.RPTDW_PRODUCT_MEASURE_ORG

- Products Model View.Product Usage Facts

Table 5-3 • Product Usage Facts

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|--|
| PRODUCT_ID | Product ID | Reference to Product. |
| ORG_UNIT_ID | OrgUnit ID | Reference to Organization Unit. |
| TIME_ID | Time ID | Reference to Time. |
| USED_COUNT | Usage Events | Number of CHECKOUT events found during the hour referenced by TIME_ID. |
| DENIED_COUNT | Denials | Number of denials (excluding ultimate denials) found during the hour referenced by TIME_ID. |
| UNSUPPORTED_COUNT | Unsupported Events | Reserved for future use. Currently always set to zero. |
| QUEUED_COUNT | Queued Events | Total number of queued events during the hour referenced by TIME_ID. |
| ULTIMATE_DENIAL_COUNT | Ultimate Denials | <p>Total number of “true” denials during the hour referenced by TIME_ID.</p>  <p>Note • A true denial is an ultimate denial or folded denial based on the configured false denials interval.</p> |
| MAX_USED_AT_PEAK_COUNT | Peak Licenses Used | Maximum number of licenses used concurrently in the hour referenced by TIME_ID. |
| TIME_AT_PEAK | Peak Time | Point in time where MAX_USED_AT_PEAK_COUNT concurrent usage first occurred within the hour referenced by TIME_ID. |
| PEAK_DURATION | Peak Duration | The elapsed time with usage levels at their peak. |
| PEAK_DENIALS | Denials at Peak | Number of ultimate denials that were encountered while usage levels were at their peak. |
| TOTAL_USED_TIME | Total Used Time | Calculated cumulative time a license has been used during this hour. For example, 2 licenses in use during 1 hour would result in 2 hours of total used time. |
| TOTAL_DENIED_TIME | Total Denied Time | Reserved for future use. Currently always set to zero. |

Table 5-3 • Product Usage Facts

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---|
| TOTAL_QUEUED_TIME | Total Queued Time | Total time a license was in the queue during this 1 hour. |
| AVERAGE_USED_TIME | Average Used Time | Total Used Time divided by Usage Events. |

ProductFeature Usage Facts

This table stores various facts about product to feature license usage with hourly break down for Organization Units.


Applicable Tables

- Data Warehouse.RPTDW_PRODFEAT_MEASURE_ORG
- ProductFeatures Model View.ProductFeature Usage Facts

Table 5-4 • ProductFeature Usage Facts

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---|
| PRODUCT_ID | Product ID | Reference to Product. |
| FEATURE_ID | Feature ID | Reference to Feature. |
| ORG_UNIT_ID | OrgUnit ID | Reference to Organization Unit. |
| TIME_ID | Time ID | Reference to Time. |
| USED_COUNT | Usage Events | Number of CHECKOUT events found during the hour referenced by TIME_ID. |
| DENIED_COUNT | Denials | Number of denials (excluding ultimate denials) found during the hour referenced by TIME_ID. |
| UNSUPPORTED_COUNT | Unsupported Events | Reserved for future use. Currently always set to zero. |
| QUEUED_COUNT | Queued Events | Total number of queued events during the hour referenced by TIME_ID. |

Table 5-4 • ProductFeature Usage Facts

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|--|
| ULTIMATE_DENIAL_COUNT | Ultimate Denials | <p>Total number of “true” denials during the hour referenced by TIME_ID.</p>  <p>Note • A true denial is an ultimate denial or folded denial based on the configured false denials interval.</p> |
| MAX_USED_AT_PEAK_COUNT | Peak Licenses Used | Maximum number of licenses used concurrently in the hour referenced by TIME_ID. |
| TIME_AT_PEAK | Peak Time | Point in time where MAX_USED_AT_PEAK_COUNT concurrent usage first occurred within the hour referenced by TIME_ID. |
| TOTAL_USED_TIME | Total Used Time | Calculated cumulative time a license has been used during this hour. For example, 2 licenses in use during 1 hour would result in 2 hours of total used time. |
| TOTAL_DENIED_TIME | Total Denied Time | Reserved for future use. Currently always set to zero. |
| TOTAL_QUEUED_TIME | Total Queued Time | Total time a license was in the queue during this 1 hour. |
| AVERAGE_USED_TIME | Average Used Time | Total Used Time divided by Usage Events. |
| (N/A) | Availability | Number of licenses for the feature that are available during the hour referenced by TIME_ID. |

Product Availability Facts

This table stores product availability facts.

Applicable Tables

- Data Warehouse.RPTDW_MEASURE_PRODUCT_AVAIL

- Products Model View.Product Availability

Table 5-5 • Product Availability Facts

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|--|
| PRODUCT_ID | Product ID | Reference to Product. |
| TIME_ID | Time ID | Reference to Time. |
| AVAILABILITY | Availability | Number of licenses available during the hour referenced by TIME_ID. |
| AVERAGE_LIST_PRICE | Average List Price | Average list price to purchase a perpetual license for this product (before discounts). |
| AVERAGE_NET_PRICE | Average Net Price | Average net price to purchase a perpetual license for this product (after discounts). |
| AVERAGE_NET_COST | Average Net Cost | Average net price paid for a license (time-based or perpetual) for this product. |
| AVERAGE_ANNUAL_FEE | Average Annual Fee | Average access fee (time-based licenses) or maintenance fee (perpetual licenses) for this product. |

Dimension Tables

TimeDimension

This table stores time information about every hour.

Applicable Tables

- Data Warehouse.RPTDW_DIM_TIME
- Data Warehouse.TimeDimension
- Products Model View.TimeDimension
- ProductFeatures Model View.TimeDimension
- Features Model View.TimeDimension

- Features Leaf Usage Model View.TimeDimension

Table 5-6 • TimeDimension

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---|
| ID | (N/A) | The format is YYYYMMDDHH, where HH represents the hour as a number, 00–23. Example: Time Id = 2009063016 This is June 30 16:00 2009. |
| SECONDS | (N/A) | Unix time. |
| DATE_NAME | (N/A) | String representing the full date. Example: Monday, March 29, 2010 |
| YEAR | Year | Year of this date. |
| QUARTER | Quarter | Number (1–4) of the calendar quarter that contains this date. For example, January 1 through March 31 are in quarter 1. |
| QUARTER_NAME | N/A | Quarter name. |
| MONTH | Month | Number indicating the month of this date. For example, December is 12. |
| MONTH_NAME | N/A | Month name. |
| MONTH_OF_QUARTER | N/A | Month of quarter. For example, April is month 1 for the second quarter. |
| WEEK | N/A | Week number of the year. |
| DAY_OF_YEAR | Day | Number (1–366) of the day of the current year for this date. |
| DAY_OF_QUARTER | N/A | Day of quarter. |
| DAY_OF_MONTH | N/A | Day of month. |
| DAY_OF_WEEK | N/A | Day of week. |
| DAY_OF_WEEK_NAME | N/A | Day of week name. |

Table 5-6 • TimeDimension

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---|
| WEEKDAY_FLAG | N/A | Number to indicate whether the day in this date is a weekday or a weekend day: <ul style="list-style-type: none"> 1—weekday 2—weekend day |
| HOUR_OF_DAY | Hour | Number (0–23) of the hour of day represented by this record. |

FeatureDimension

This table stores feature-related data from a license file.

Applicable Tables

- Data Warehouse.RPTDW_FEATURE
- Data Warehouse.FeatureDimension
- Products Model View.FeatureDimension
- ProductFeatures Model View.FeatureDimension
- Features Model View.FeatureDimension
- Features Leaf Usage Model View.FeatureDimension

Table 5-7 • FeatureDimension

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---|
| ID | Feature ID | Primary key. |
| NAME | Feature Name | Feature name. |
| DISPLAY_NAME | Display Name | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| VENDOR_ID | Vendor ID | Vendor daemon reference. |
| SOFTWARE_CATEGORY | Software Category | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| COST_FACTOR | Cost Factor | FlexNet Manager for Engineering Applications does not update this property; for custom use. |

Table 5-7 • FeatureDimension

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---------------------|
| LAST_MODIFIED_TIME | LAST_MODIFIED_TIME | Last modified time. |

ProductDimension

This table stores product-related data from a license file.

Applicable Tables

- Data Warehouse.RPTDW_PRODUCT
- Data Warehouse.ProductDimension
- Products Model View.ProductDimension
- ProductFeatures Model View.ProductDimension

Table 5-8 • ProductDimension

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|------------------------------|
| ID | Product ID | Primary key. |
| SOFTWARE_PRODUCER_ID | Software Producer ID | Software producer reference. |
| PRODUCT_NAME | Product Name | Product name. |
| PRODUCT_NUMBER | Part Number | Part number. |
| PRODUCT_VERSION | Product Version | Product version. |
| PRODUCT_CATEGORY | Category | Software category. |
| PRODUCT_FAMILY | Family | Software family. |
| NOTES | NOTES | Notes. |
| LAST_MODIFIED_TIME | LAST_MODIFIED_TIME | Last modified time. |

ProductFeature

This table stores product-feature mapping data.

Applicable Tables

- Data Warehouse.RPTDW_PRODUCT_FEATURE
- Data Warehouse.ProductFeature
- Products Model View.ProductFeature
- ProductFeatures Model View.ProductFeature

Table 5-9 • ProductFeature

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|--|
| N/A | Feature Name | Feature name. |
| N/A | Display Name | Alternate feature name. FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| MIN_FEATURE_VERSION | Minimum Feature Version | Minimum feature version required for the product. |
| FEATURE_QTY | Feature Quantity | Number of feature licenses per 1 product license. |
| N/A | Software Category | Software category. |
| N/A | Vendor ID | Vendor daemon reference. |
| PRODUCT_ID | Product ID | Product reference. |
| FEATURE_ID | Feature ID | Feature reference. |
| LAST_MODIFIED_TIME | LAST_MODIFIED_TIME | Last modified time. |

User

This table stores user information.

Applicable Tables

- Data Warehouse.RPTDW_USER
- Data Warehouse.RPTDW_LEAF_USER
- Products Model View.User
- ProductFeatures Model.View.User
- Features Model View.User

- Features Leaf Usage Model View.User

Table 5-10 • User

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---|
| ID | ID | Primary key. |
| NAME | User Name | User login ID (in uppercase). |
| FIRST_NAME | First Name | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| LAST_NAME | Last Name | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| EMAIL | E-mail | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| PHONE | Phone Number | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| CELL_NUMBER | Mobile Number | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| STATUS | STATUS | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| ADDRESS1 | Address 1 | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| ADDRESS2 | Address 2 | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| CITY | City | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| POSTAL_CODE | Postal Code | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| STATE_PROVINCE | State / Province | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| COUNTRY | Country | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| DEPARTMENT | Department | FlexNet Manager for Engineering Applications does not update this property; for custom use. |

Table 5-10 • User

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---------------------|
| LAST_MODIFIED_TIME | LAST_MODIFIED_TIME | Last modified time. |

Project

This table stores Project description.

Applicable Tables

- Data Warehouse.RPTDW_PROJECT
- Data Warehouse.RPTDW_LEAF_PROJECT
- Products Model View.Project
- ProductFeatures Model.View.Project
- Features Model View.Project
- Features Leaf Usage Model View.Project

Table 5-11 • Project

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---|
| ID | Project ID | Primary key. |
| LM_PROJECT | Project Name | Project Name (based on <i>LM_PROJECT</i> environment variable). |
| DISPLAY_NAME | Display Name | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| LAST_MODIFIED_TIME | LAST_MODIFIED_TIME | Last modified time. |

License Server Host

This table stores information about a license server host.

Applicable Tables

- Data Warehouse.RPTDW_SERVER_HOST
- Data Warehouse.RPTDW_LEAF_SERVER_HOST

- Products Model View.License Server Host
- ProductFeatures Model.View.License Server Host
- Features Model View.License Server Host
- Features Leaf Usage Model View.License Server Host

Table 5-12 • License Server Host

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---|
| ID | ID | Primary key. |
| HOST_NAME | Host Name | License server host name. |
| DISPLAY_NAME | Display Name | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| LAST_MODIFIED_TIME | LAST_MODIFIED_TIME | Last modified time. |

Vendor Daemon

This table stores vendor daemon data.

Applicable Tables

- Data Warehouse.RPTDW_VENDOR
- Products Model View.Vendor Daemon
- ProductFeatures Model.View.Vendor Daemon
- Features Model View.Vendor Daemon
- Features Leaf Usage Model View.Vendor Daemon

Table 5-13 • Vendor Daemon

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---|
| ID | ID | Primary key. |
| VENDOR_NAME | Vendor Name | Vendor name. |
| DISPLAY_NAME | Display Name | FlexNet Manager for Engineering Applications does not update this property; for custom use. |
| LICENSE_SYSTEM | N/A | The licensing system used: FLEX, LUM, and so on. |

Table 5-13 • Vendor Daemon

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---------------------------------|
| SOFTWARE_PRODUCER_ID | N/A | Reference to software producer. |
| LAST_MODIFIED_TIME | LAST_MODIFIED_TIME | Last modified time. |

Organizational Structure Tables

Organization data is accessed through a single view of three tables in the physical database: RPTDW_ORG_UNIT_MAP, RPTDW_ORG_UNIT_NODE, and RPTDW_ORG_UNIT_TYPE.

Organization

This table stores Organization structure data.

Applicable Tables

- Data Warehouse.RPTVW_ORG_STRUCTURE
- Products Model View.Organization
- ProductFeatures Model View.Organization
- Features Model View.Organization
- Features Leaf Usage Model View.Organization

Table 5-14 • Organization

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|--|
| ID | ID | Primary key. |
| ORG_NODE_NAME | Unit Name | Organization node name. |
| ORG_UNIT_ID | Unit ID | Child node ID. |
| PARENT_ORG_UNIT_ID | Parent ID | Parent node ID. |
| ORG_TYPE_NAME | Organization Name | Organization name. |
| START_DATE | Start Date | Effective start date of the child-to-parent node relationship. |

Table 5-14 • Organization

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|--|
| END_DATE | End Date | Effective end date of the child-to-parent node relationship. |
| LVL | Level Number | Organization structure level number. |
| PROJECT_ID | Project ID | Reference to project. |
| USER_ID | User ID | Reference to user. |
| SERVER_HOST_ID | Server Host ID | Reference to license server host. |
| STATUS | Organization Status | Organization status. |

Other Tables

SoftwareProducer

This table stores software producer data.

Applicable Tables

- Data Warehouse.RPTVW_SOFTWARE_PRODUCER
- Products Model View.SoftwareProducer
- ProductFeatures Model View.SoftwareProducer

Table 5-15 • SoftwareProducer

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---------------------------------|
| ID | ID | Primary key. |
| NAME | Software producer name | Software producer company name. |
| SOFTWARE_CATEGORY | Category | Software Category. |
| NOTES | NOTES | Notes. |
| LAST_MODIFIED_TIME | LAST_MODIFIED_TIME | Last modified time. |

SoftwareVendor

This table stores software vendor data.

Applicable Tables

- Data Warehouse.RPTVW_SOFTWARE_VENDOR
- Products Model View.SoftwareVendor
- ProductFeatures Model View.SoftwareVendor

Table 5-16 • SoftwareVendor

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|-------------------------------|
| ID | ID | Primary key. |
| NAME | Software vendor name | Software vendor company name. |
| SOFTWARE_CATEGORY | Category | Software category. |
| NOTES | NOTES | Notes. |
| LAST_MODIFIED_TIME | LAST_MODIFIED_TIME | Last modified time. |

PoolProductLicenses

This table stores information about product licenses in a contract software pool.

Applicable Tables

- Data Warehouse.RPTDW_PRODUCT_LICENSE
- Data Warehouse.PoolProductLicenses
- Products Model View.PoolProductLicenses
- ProductFeatures Model View.PoolProductLicenses

Table 5-17 • PoolProductLicenses

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|--------------------------|
| ID | ID | Primary key. |
| POOL_ID | POOL_ID | Contract pool reference. |

Table 5-17 • PoolProductLicenses

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|-----------------------------|--|
| PRODUCT_ID | PRODUCT_ID | Product reference. |
| CURRENT_QUANTITY | Current Quantity | Number of product licenses. |
| EFFECTIVE_DATE | Effective Date | Effective date for a product license. |
| EXPIRE_DATE | Expiration Date | Expiration date for a product license. |
| NET_PRICE | Net Price | A product license net price. |
| ANNUAL_FEE_PERCENT | Annual Fee Percent | Annual fee percent. |
| PO_NUMBER | Purchase Order Number | Purchase order number. |
| PURCHASE_REQ_NUMBER | Purchase Requisition Number | Purchase requisition number. |
| (N/A) | Pricing Model | Reserved for future use. |
| (N/A) | List Price | List price. |
| NOTES | NOTES | Notes. |
| LAST_MODIFIED_TIME | LAST_MODIFIED_TIME | Last modified time. |

PoolProduct

This table stores information about products in a contract pool.

Applicable Tables

- Data Warehouse.RPTDW_POOL_PRODUCT

Table 5-18 • PoolProduct

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---|
| ID | (N/A) | Primary key. |
| PRODUCT_ID | (N/A) | Product reference. |
| POOL_ID | (N/A) | Contract pool reference. |
| PRICING_MODEL | (N/A) | This property is reserved for future use. |

Table 5-18 • PoolProduct

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---------------------|
| LIST_PRICE | (N/A) | List price. |
| NOTES | (N/A) | Notes. |
| LAST_MODIFIED_TIME | (N/A) | Last modified time. |

Pool

This table stores software pool data for a contract.

Applicable Tables

- Data Warehouse.RPTDW_POOL
- Products Model View.Pool
- ProductFeatures Model View.Pool

Table 5-19 • Pool

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|---|
| ID | ID | Primary key. |
| CONTRACT_ID | CONTRACT_ID | Contract reference. |
| ORG_UNIT_ID | ORG_UNIT_ID | Organization node to which this license pool is assigned. |
| POOL_NAME | Pool Name | Pool name. |
| INITIAL_VALUE | Initial Value | Initial value of the pool for remix purposes, entered by user. |
| IS_PRODUCTION | Is Production | Production flag indicates if the product licenses in the pool can be used for production work or only for testing and development purposes: Yes/No. |
| REMIXABLE_PERCENT | Remixable | The percent of the pool that is remixable. |
| REMIXES_PER_YEAR | Remixes Per Year | Number of times that the pool can be remixed each year. |

Table 5-19 • Pool

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|--|
| NEXT_REMIX_DATE | Next Remix Date | Next date the pool is scheduled to be remixed. |
| DISCOUNT_PERCENT | Discount Percent | Percentage reduction in list price for product license in the pool. |
| UPLIFT_PERCENT | UpLift Percent | Percentage increase in discounted price for product licenses in the pool. |
| ANNUAL_FEE_PERCENT | Annual Fee Percent | Percentage of list price paid to the software vendor each year for each product license in the pool. This is known as annual maintenance for perpetual licensing models and as an annual access fee for time-based licensing models. |
| SHAREABLE_TYPE | Shareable Type | How widely the product licenses in the pool can be shared: <ul style="list-style-type: none"> • Not Shareable • Regionally Shareable • Globally Shareable |
| LICENSING_MODEL | Licensing Model | Perpetual or Time-based. |
| GEOGRAPHY | Geography | Geography. |
| SITE | Site | Site. |
| NOTES | NOTES | Notes. |
| LAST_MODIFIED_TIME | LAST_MODIFIED_TIME | Last modified time. |

Contract

This table stores contract data.

Applicable Tables

- Data Warehouse.RPTDW_CONTRACT
- Products Model View.Contract

- ProductFeatures Model View.Contract

Table 5-20 • Contract

| Column Name: Data Warehouse | Column Name: Data Model | Description |
|--------------------------------|----------------------------|--|
| ID | ID | Primary key. |
| SOFTWARE_VENDOR_ID | SOFTWARE_VENDOR_ID | Software vendor company reference. |
| CURRENCY_ID | CURRENCY_ID | Reserved for future use. Currency reference. |
| CONTRACT_NAME | Contract Name | Contract name. |
| FIXED_COST | Fixed Cost | Fixed cost. |
| VARIABLE_COST | Variable Cost | Variable cost. |
| START_DATE | Start Date | Contract start date. |
| END_DATE | End Date | Contract end date. |
| CONTRACT_VALUE | Contract Value | Contract value. |
| NEXT_MAINTENANCE_DATE | Next Maintenance Date | Next maintenance date. |
| PAYMENT_AMOUNT | Payment Amount | Payment amount. |
| PAYMENT_START_DATE | Payment Start Date | Payment start date. |
| PAYMENT_END_DATE | Payment End Date | Payment end date. |
| PAYMENT_INTERVAL | Payment Interval | Payment interval. |
| NOTES | NOTES | Notes. |
| LAST_MODIFIED_TIME | LAST_MODIFIED_TIME | Last modified time. |

Diagrams

This section provides graphical representations of the data warehouse and data model.

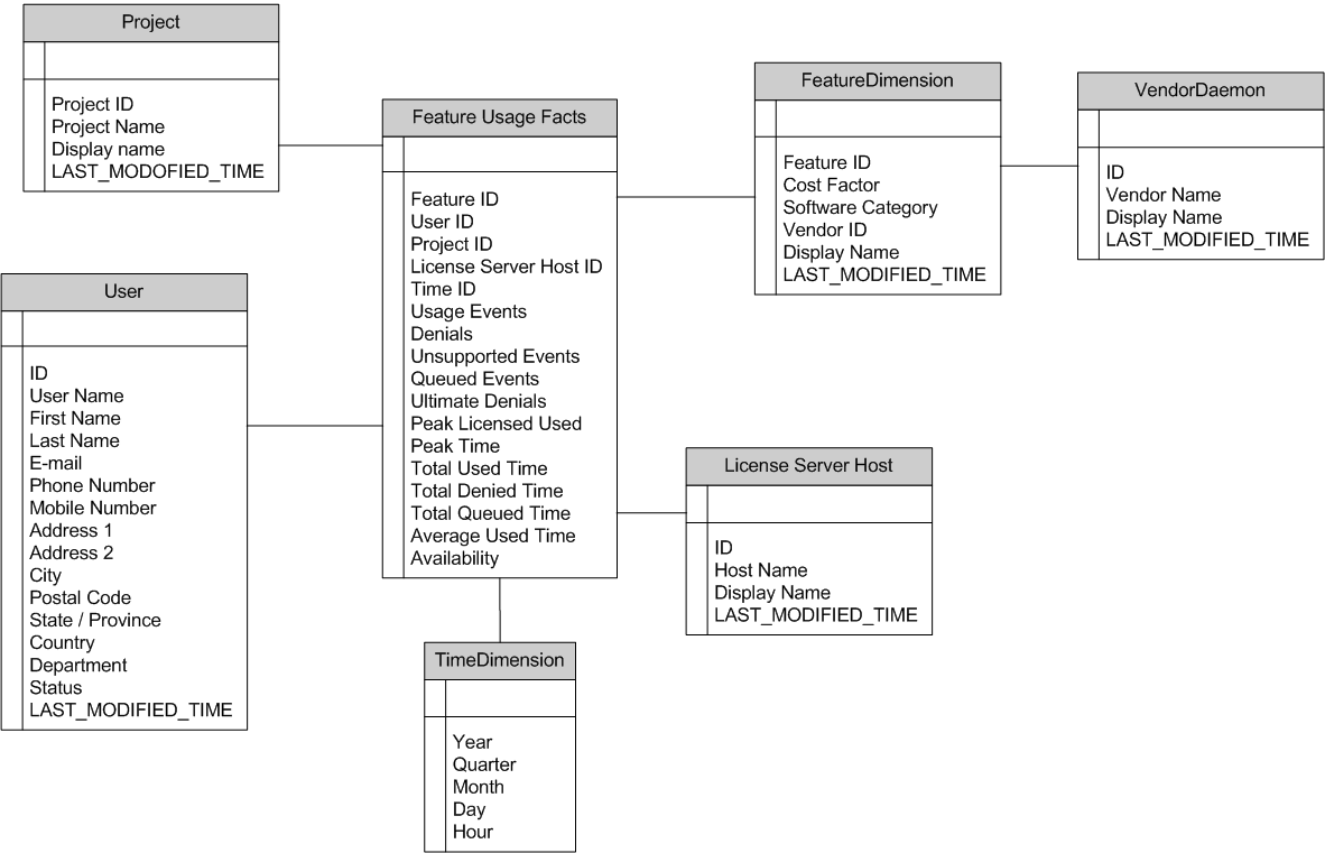


Figure 5-1: Model: Feature Leaf View

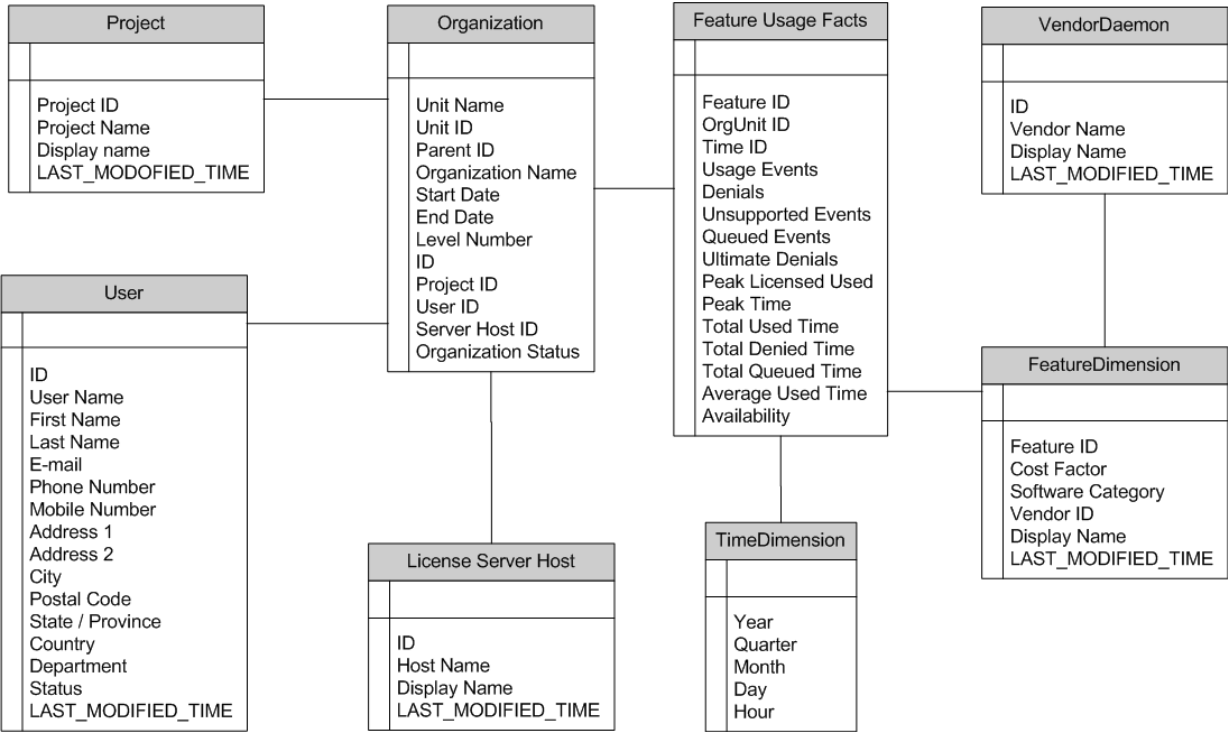


Figure 5-2: Model: Feature Usage-Organization View

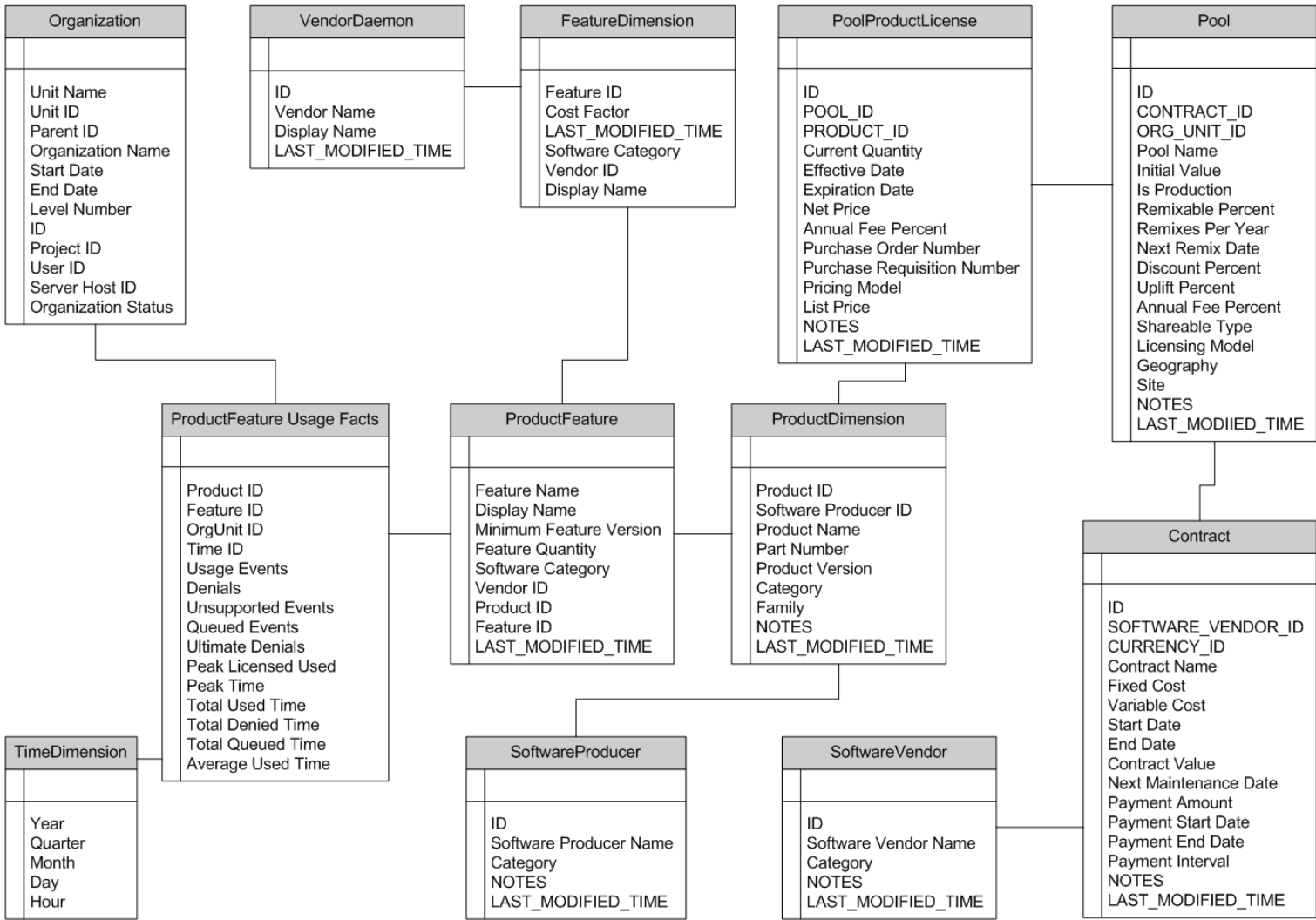


Figure 5-3: Model: ProductFeature View

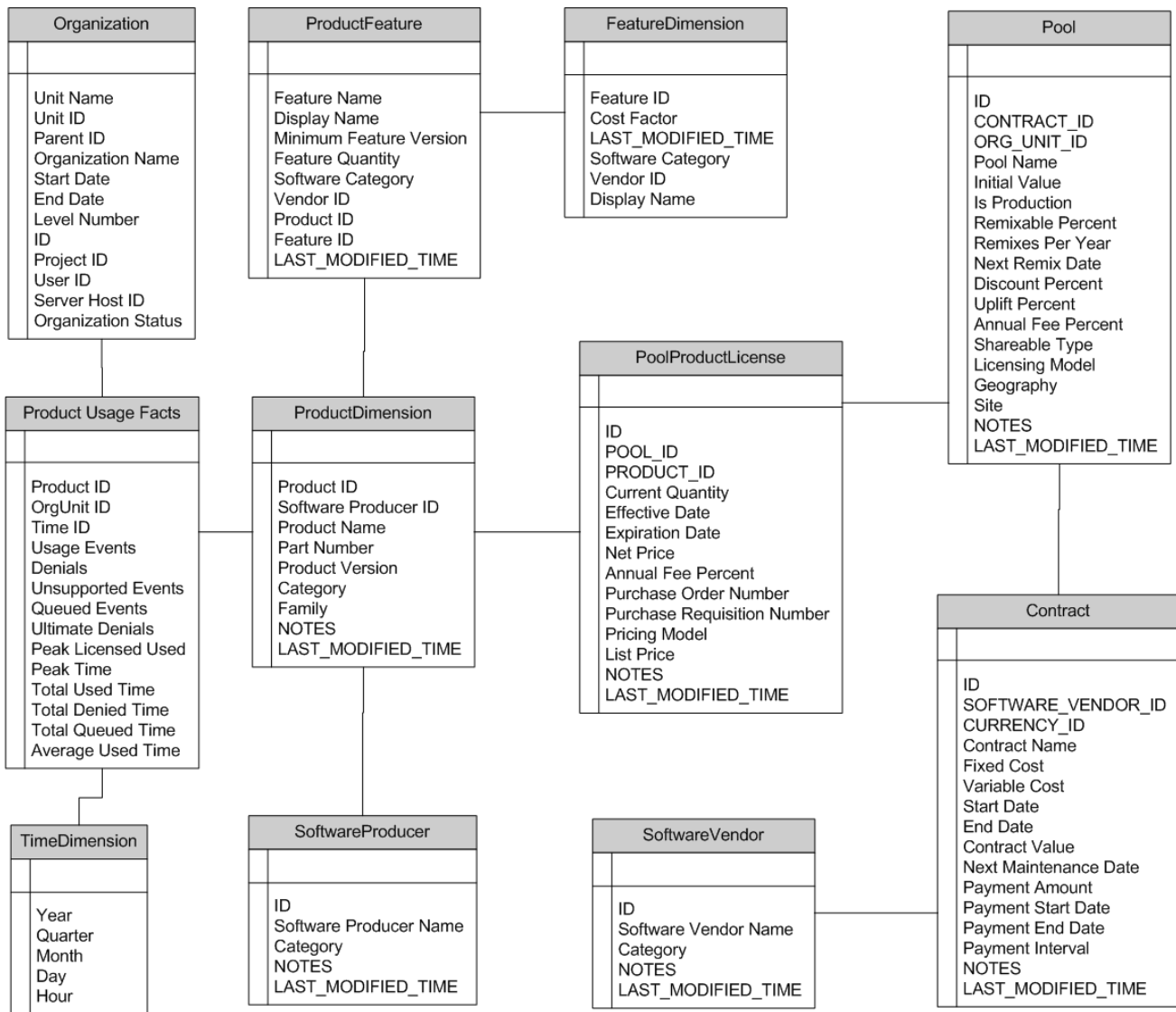


Figure 5-4: Model: Product View

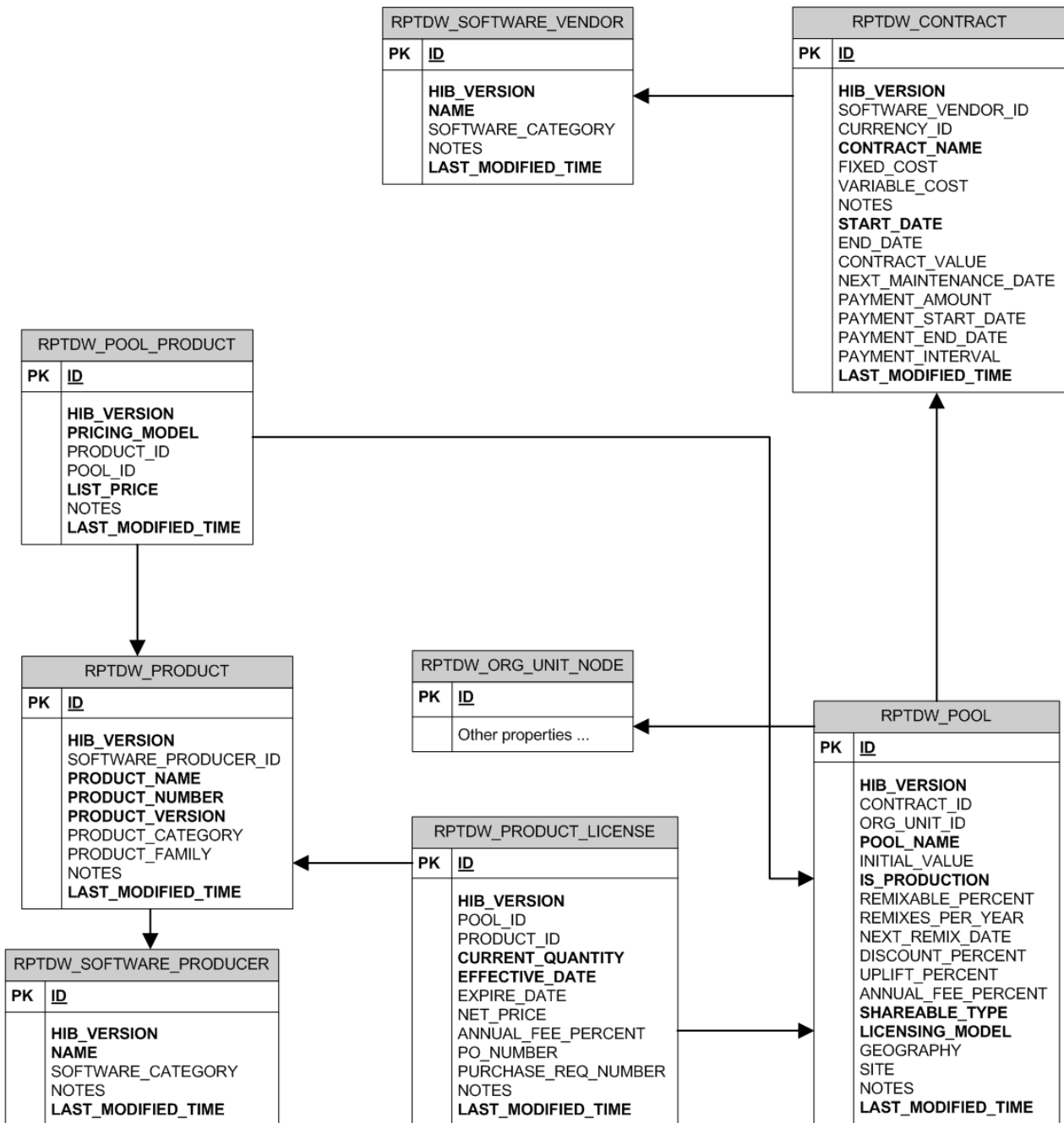


Figure 5-5: Data Warehouse: Contracts

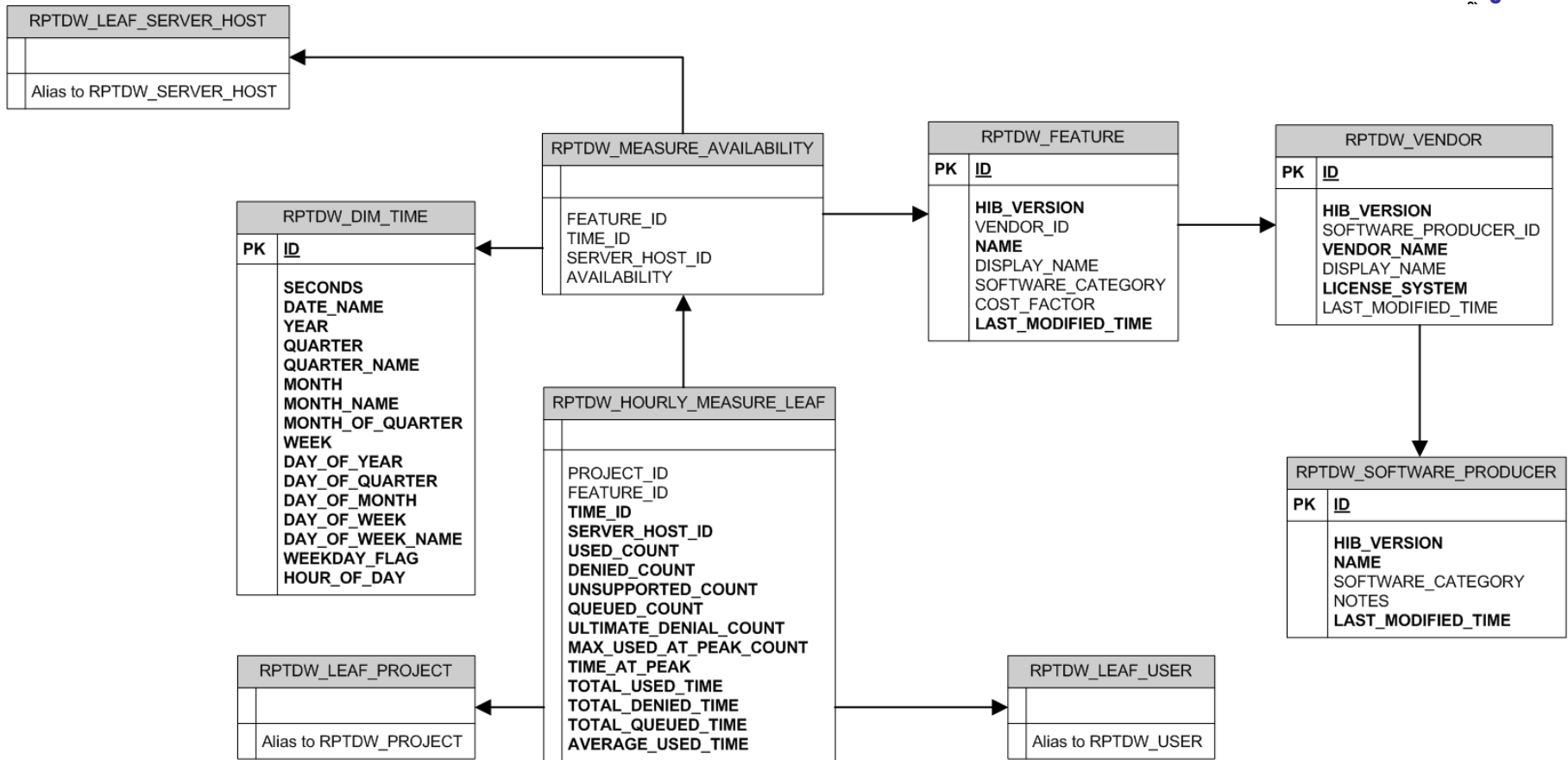


Figure 5-6: Data Warehouse: Feature Leaf

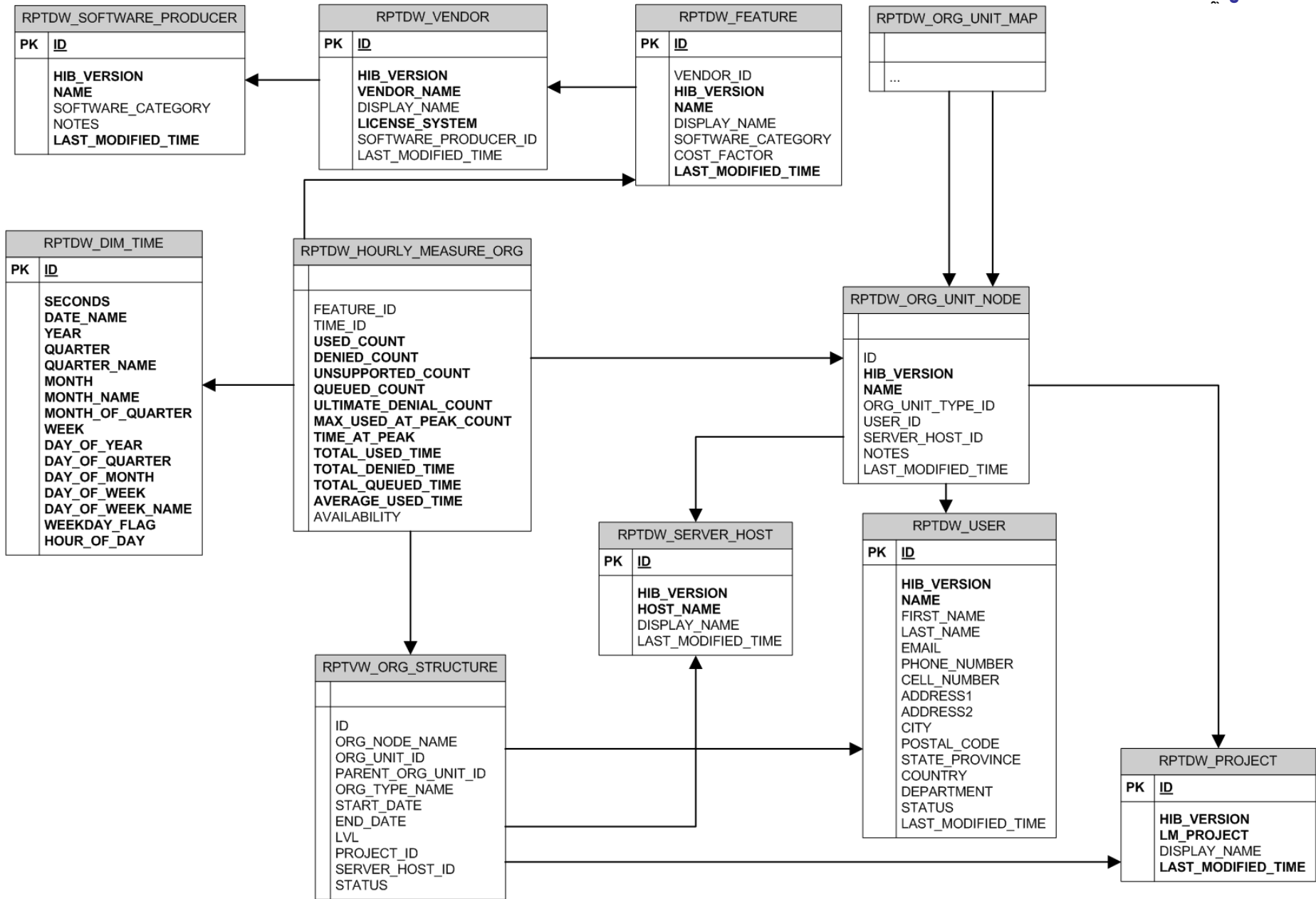


Figure 5-7: Data Warehouse: Feature Org

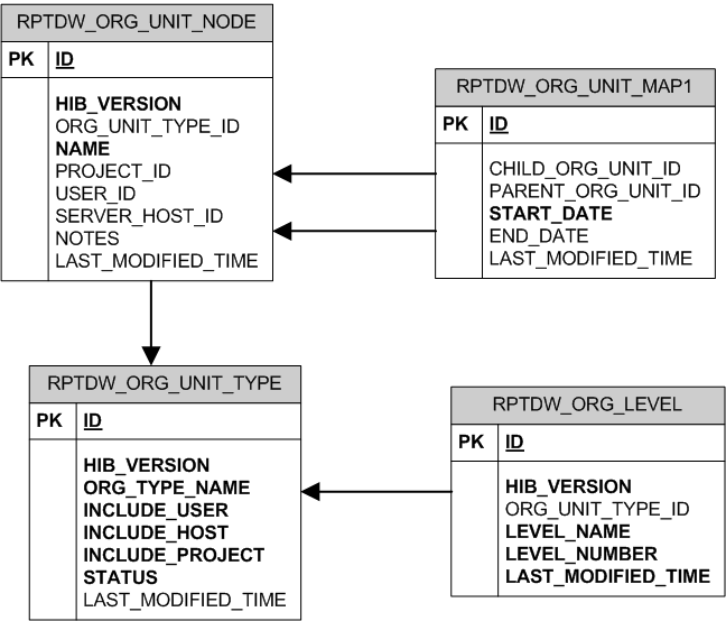


Figure 5-8: Data Warehouse: Organization

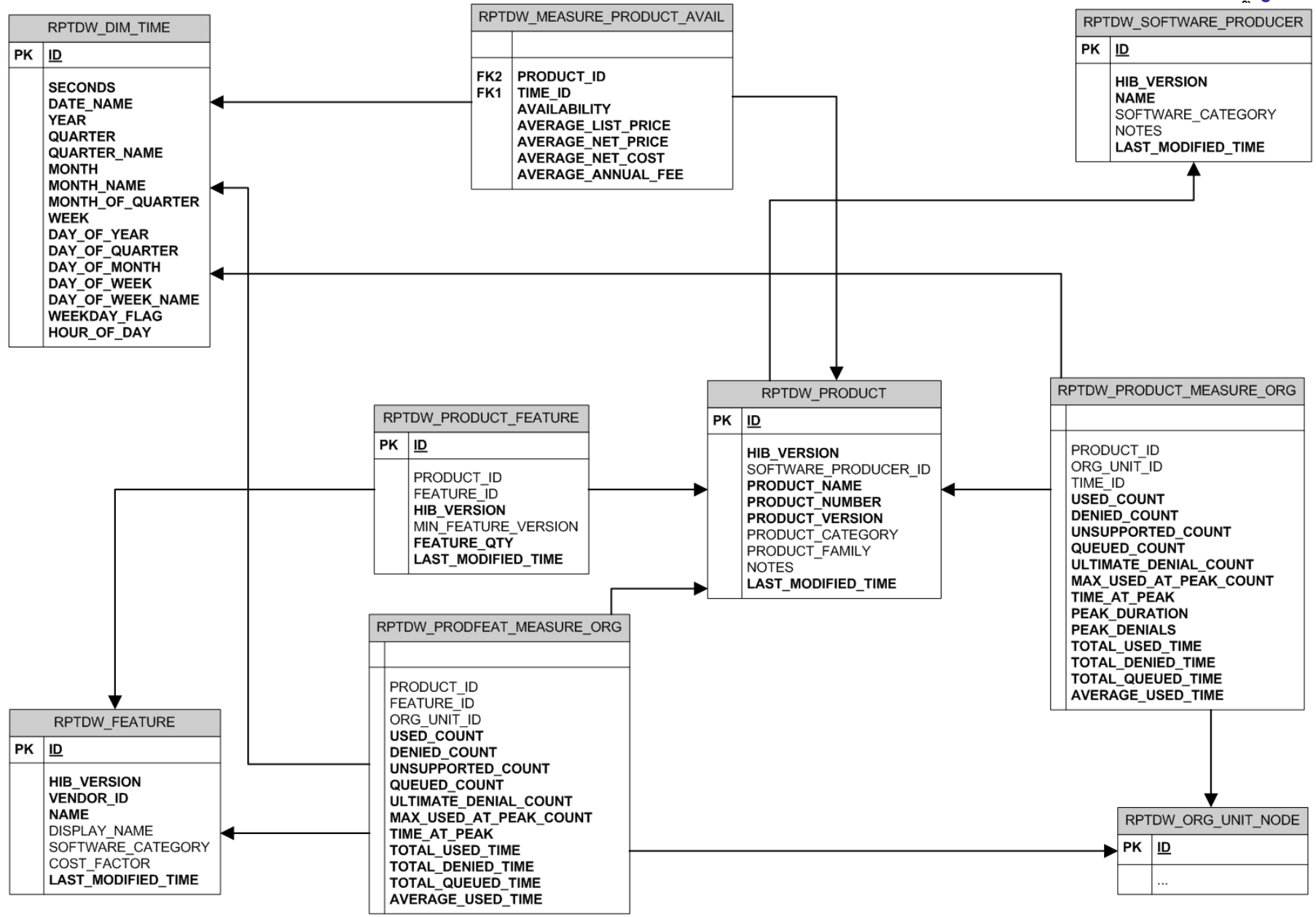


Figure 5-9: Data Warehouse: Product

Index

A

Aggregation History report [47](#)

C

chargeback report
by feature [47](#)
by product [51](#)

D

Dashboard report [47](#)
data model [59](#)
data warehouse [59](#)

F

Feature Chargeback report [47](#)
Feature Peak Usage by Product report [53](#)
Feature Usage (Previous Month) Report [8](#), [49](#)
Feature Usage by Organization Table report [7](#)
Feature Usage report [48](#)
Feature Usage Report (by Month) [49](#)
Feature Usage Table report [8](#)

G

Geographic Feature Usage report [49](#)

O

Operational Dashboard widgets [12](#)
Organization Peak Usage by Feature report [50](#)
Organization Peak Usage Summary report [57](#)
Organization Total Usage Chart report [9](#)

P

Peak Usage by Organization Over Time report [10](#)
Peak Usage by Server Over Time report [11](#)
Peak Usage Summary report [57](#)
Product Chargeback report [51](#)
Product Daily Peak Usage report [52](#)
Product Peak Usage Occurrences report [55](#)
Product Peak Usage report [54](#)
Product Peak Usage Trend report [56](#)

R

Remix report [56](#)
Report Designer
data model [59](#)
reports
Aggregation History [47](#)
Dashboard [47](#)
Feature Chargeback [47](#)
Feature Peak Usage by Product [53](#)
Feature Usage [48](#)
Feature Usage by Organization Table [7](#)
Feature Usage Table [8](#)
Geographic Feature Usage [49](#)
Organization Peak Usage by Feature [50](#)

Organization Peak Usage Summary [57](#)
Organization Total Usage Chart [9](#)
Peak Usage by Organization Over Time [10](#)
Peak Usage by Server Over Time [11](#)
Product Chargeback [51](#)
Product Daily Peak Usage [52](#)
Product Peak Usage [54](#)
Product Peak Usage Occurrences [55](#)
Product Peak Usage Trend [56](#)
Remix [56](#)

U

Usage Summary by Organization report [51](#)

W

widgets

Operational Dashboard [12](#)