

Quick Reference Guide: Trunks Database

The Infortel Select Trunks database lets you assign your trunk routes to facilities based on common billing features. For example, if you have several trunks that use a specific carrier, you may create a facility and designate a rating method just for them. The data source(s) you specified during the installation process will appear in the left pane of the **Trunks Database** screen.

If you have Cisco's CallManager Voice over IP (VoIP) system, there is a slightly different process and rationale in setting up your trunks database. With VoIP, each gateway can be thought of as a trunk, a group of gateways is analogous to a facility, and an entire IP network is equivalent to a data source. Calls within an IP network are local calls. Once Infortel Select collects call record data from Cisco's CallManager, it will convert them to standard CDR format, and rate and process them for reporting. Once the records are in Infortel Select, you can use all standard features, including call pricing, reporting, and report scheduling and distribution.

The Trunks database can be accessed either through a client/server system, or the Web. Please refer to the Web interface manual for more information on using the Trunks database on the web.

DISPLAYING DATA SOURCES

The **Select Data Sources to Display** text box and **Word Search** button appear when the number of data sources exceeds the maximum number defined at the **Misc. System Options 1** screen during installation.

Enter your search string in the **Select Data Sources to Display** text box, click the adjoining **Word Search** button, and all data sources that meet the search criteria will display in the **Trunks Database** screen.

To re-display the first data sources, clear the **Select Data Sources to Display** text box, and click the **Word Search** button.

CREATING A TRUNKS DATABASE

The Data Sources specified during the installation process will be displayed in the left pane of the **Trunks Database** screen, and is the highest level in the Trunks hierarchy. Below Data Source is Facility. A Facility is a group of Trunks that share a common rating method.

Before creating the Trunks database, it is useful to identify the Trunk Routes that share a common billing method and put them each into a separate Facility. Your choice of the name used for each Facility is important because those names will appear in Infortel Select choice lists and reports.

When adding a facility to a data source, you are able to select the country where the facility is located, as some countries have their own unique rate tables, billing descriptions, and call types. However, once a facility is created, the **Country** field cannot be modified. If you need to change the country, you must delete that facility and create a new one with the correct country.

Note: Infortel Select will not allow duplicate trunk identifiers in the same group.

Adding to the Trunks Database

The Data Sources specified during the installation of Infortel Select are the highest levels in the Trunks Tree. Facilities are the next level down followed by Trunk Routes.



ADDING A FACILITY

The data sources specified during the installation process will be displayed in the left pane of the **Trunks Database** screen, and are the highest levels in the Trunks database hierarchy. These cannot be edited. Below data source, is facility. A facility is a group of trunks that share a common rating method.

Since countries have their own unique rate tables, billing descriptions, and call types, when creating a facility, you are able to select the country where that facility is located.

Usually, trunk members that use the same carrier are in the same facility; however, you may need to define more than one facility for each carrier if there are different types of lines, storage options, billing descriptions, etc., associated with some of the trunk members. Data for the line ID types and for the billing classes is loaded at the time your Infortel Select system is installed.

The first step in creating the Trunks database is adding a facility. To add one, follow these steps:

1. In the left pane of the **Trunks** database screen, highlight the data source symbol  to which you want to add a facility.
2. Click the  button, and the **Add Facility** dialog box will appear.
3. In the **Facility Name** text box, type the name of the new facility. You can use up to 25 alphanumeric characters. This is a required field and within each data source, must be a unique name. . If you have Infortel WirelessNOW, suggested facility names (depending on the type of call), are listed below:
 - Home Voice
 - Roam Voice
 - Home SMS
 - Roam SMS

Note: For billing purposes, it is highly recommended that you set up a separate facility for each type of call.

4. From the **Country** list box, select the country where the trunk is located.

Note: You can modify the country ONLY for a default facility AND if the **Auto Add Trunks and Gateways** check box is selected at the **Define Data Source Name** dialog box in System Configuration Options. If the above do not apply, the country field cannot be modified and you must delete that facility and create a new one with the correct country. For more information please refer to the **Changing a Country for a Default Facility** section [on page 4](#).

5. From the **Line ID** list box, select the type of line to associate with the facility. Select one the following line IDs:
 - C/O - Standard Line
 - COA - Standard Line with Ans. Sup. (Answer Supervision)
 - DID - Incoming Line
 - Tie - Tie Line
 - SDN - Software Defined Network
 - SDA - Software Defined Network with Ans. Sup. (Answer Supervision)

Tip: You are able to define as many facilities for a data source as needed to logically sort line IDs for billing purposes.

Note: If you are setting up a facility to track internal calls, use Tie as the Line ID.

General Tab

At the **General** tab perform the following:

- The **Billing Class** column contains the billing classes that were selected during the installation of the product. From the adjoining list boxes, select the billing description for the base cost and each of the billing classes for the facility.

Note: If you purchased the optional Hospitality module, you can only pick a billing description for your base cost. Billed cost is based on the billing description tied to the extension in the Directory database.

- The base cost is the actual cost of the call.
- Depending on the billing class selected, Infortel Select will, based upon the extension or extension range specified in the Directory database, or Account code specified in the Accounts database, calculate the billed price of the call using a different billing description.

Note: You must at least select a billing description for the Base Cost and Default Billing class names.

- Click the **Check here if all long distance calls...** check box if your PBX requires you to dial "1" before a ten-digit call outside the home area code. If you check this box, then you must dial "1" before making calls outside your home area code in order for the system to rate them correctly.
- In the **Home Area Code** text box, the area code for the selected data source is displayed.
- In the **Area Codes** text boxes, enter other area codes that can be dialed with a seven-digit call. These text boxes hold all the area codes that you use to make local calls within a particular facility.
- In the **GMT Offset** drop-down list box, select the time zone of the facility's location.
- From the **Matching Arena** list box, select the matching arena the facility will belong to. The default selection is **None**. An arena is a group of trunks that are used to route calls from one PBX to another. Examples include an MPLS cloud or tie lines. The following are rules for tandem call matching as they apply to trunks:
 - The first call has to be either station-to-station or trunk-to-trunk. The outbound trunk must belong to one of the facilities in the matching arena.
 - The second call has to be either trunk-to-station or trunk-to-trunk. The inbound trunk must belong to one of the facilities in the matching arena.
 - The first and second calls must be from different data sources.

Note: This list box appears only if the Matching Arena option was installed on the product key.

- Click the **Facility uses Daylight Savings Time** check box if the time zone of the facility uses daylight savings time.

Note: The **GMT Offset** list box and the **Daylight Savings Time** check box will not appear for a Cisco data source.

- Enter the desired grade of service in the text box in the following format: N.NNNN. What is entered will help calculate the number of trunks required for this facility.

Note: Entering a desired grade of service is optional. If a desired grade of service is not entered, the default desired grade of service that was specified during the installation process will be used.

Adjustments Tab

A **grace period** specifies the minimum period of time in seconds that it takes to place a call. The software will ignore the call if its duration is less than the amount specified as the grace period. The software subtracts the **adjustment period** (in seconds) from the call's duration when the call lasts longer than the grace period.

Specifying grace and adjustment periods eliminates any charges to customers for the amount of time required for telephone systems to access a trunk and until they hang up when they receive busy signals. Setting grace and adjustment periods help eliminate price differences between ring and connectivity time.

While the carrier can detect when the destination party for an outbound call has actually answered a phone call, your own telephone equipment use an internal timer to assign duration to a telephone connection. Most standard telephone equipment times calls beginning at the second that someone picks up the receiver to make a call.

For example, suppose that you specify the grace period as 30 seconds and the adjustment period as 15 seconds. If a call lasts only 10 seconds, the call will cost nothing because its duration was less than the grace period. However, if the call lasts one minute, Infortel for Windows subtracts the 15-second adjustment period from the call's duration of one minute, and the call cost is based on a 45-second duration.

Note: If you have a telephone system with answer supervision, the **Grace Period** and **Adjustment Period** text boxes are left as zero.

To set the grace and adjustment periods, follow these steps:

1. At the **Add Facility** (or **Edit Facility**) dialog box, click the **Adjustments** tab.
2. For each Jurisdiction, type the grace and adjustment times in seconds in the appropriate columns. The adjustment period must be equal to or less than the grace period.

Note: Calls that are of zero duration after the adjustment period is subtracted or calls that are less than the grace period are not priced or stored.

When you finish entering information, click the **OK** button. When you do this, the new facility is added to the Trunks tree.

-or-


If you clicked the **Continuous Add** check box, click the **OK** button and the **Add Facility** dialog box will remain displayed.

CHANGING A COUNTRY FOR A DEFAULT FACILITY

You can modify the country ONLY for a default facility AND if the **Auto Add Trunks and Gateways** check box is selected at the **Define Data Source Name** dialog box in System Configuration Options. If these do not apply, the country field cannot be modified and you must delete that facility and create a new one with the correct country.

Default Facility with Auto Add Turned On

If you need to change a country for a default facility AND the Auto Add Trunks and Gateways check box is selected at the Define Data Source Name dialog box in System Configuration Options, perform the following:

1. Highlight the Facility in the Trunks Database tree.
2. Click the **Recreate** button , or from the **Edit** menu, or by right clicking in the screen to display the pop-up menu, select **Recreate**. A **Recreate Default Facility** dialog box for the chosen facility will appear.
3. At the **Recreate Default Facility** dialog box, select a new country from the **Choose a different country** list box.
4. After you select a country, select a billing description from the list box.

Note: you must select a billing description to activate the **OK** button.

5. Click **OK** and the new country and billing description will appear for the facility.

Default Facility with Auto Add Turned Off

If you need to change a country for a default facility and the **Auto Add Trunks and Gateways** check box is NOT selected at the **Define Data Source Name** dialog box in System Configuration Options, the first thing to do is access System Configuration Options to select the checkbox:

1. At the Infortel Select **Control Center**, select **Administration** → **System Configuration options**, and the **System Configuration** screen will appear.
2. From the list, select **Define Data Source Name**.
3. From the **Data Source** list box, select the data source that the facility you want to change the country for belongs.
4. Click the **Run** button and **Define Data Source Name** dialog box will appear.
5. There, click the **Auto Add Trunks and Gateways** check box and click **OK**.
6. Back at the **System Configuration** screen, click **Exit**.
7. Follow steps 1 – 5 from above.

TRUNKS DATABASE AND INTERNAL CALLS



In order to handle internal calls (calls within your IP Network), you must create a “dummy” Facility and Trunks group in the Trunks database. Set up the Facility with a Line ID of **TIE**. The Facility and Trunk group must have an IP address consisting of nines (9). Use the number nine to represent each digit of your extension numbering. For example, if you have 5-digit extensions, the IP address should be “99999”.

ADDING A ROUTE

The Infortel Select Trunks database lets you assign your trunk routes to facilities based on common rating methods. For example, if you have several trunks that use a specific carrier, you may create a facility and designate a rating method just for them.

Before creating a Trunk Route, it is useful to identify those routes that use a common billing method and put them each into a separate facility.

Once a facility has been created, you may add a trunk route to it. To add a Trunk Route, follow these steps:

1. In the **Trunks Database** screen, highlight the facility symbol  to which you want to add a trunk route.
2. Click the  button, and the **Add Route** screen will appear.
3. In the **Route Name** text box, type the name of the new route. You can use up to 10 alphanumeric characters. This is a required field and within each data source, must be a unique name.
4. In the **Route ID** text box, enter the ID of the route. The length of the ID depends on your PBX. This is a required field and within each data source, must be a unique name.
5. In the **Access Codes** text boxes, enter the access code or codes to be used with this route. For example, dialing 9 for an outside line is an access code.
6. In the **Member Range Start** and **End** text boxes, enter the beginning and ending numbers in the range of trunk members. These are optional fields, and the numbers do not have to be unique.

Note: In order to maintain accurate Trunk Analysis reports, the starting number must be lower than the ending number.

7. In the **GMT Offset** list box, select the time zone of the gateway’s location.

Note: This list box only appears in a system using Cisco CallManager.

8. Select the **This Gateway's Time Zone** check box if where the gateway is located uses daylight savings time.

Note: This check box only appears in a system using Cisco CallManager.

9. When you finish entering information, click the **OK** button. When you do this, the new route is added to the Trunks tree.
-or-
10. If you clicked the **Continuous Add** check box, click the **OK** button and the **Add Route** dialog box will remain displayed.

ADDING A ROUTE RANGE

If your PBX supports trunk routes (for example, Siemens or Mitel) instead of trunk members, you are able to add a number of routes at the same time.

To do this, click the **Add Route Range** button at the **Add Facility** or **Add Route** screens, and the **Add Route Range** screen will appear.

To add a range of trunk routes, follow these steps:

1. In the Trunks tree, highlight the facility to which you want to add the range of trunk routes.
2. Click the Add Route Range, and the **Add Route Range** dialog box will appear.
3. In the **Start** text box enter the first Identifier number in the range.
4. In the **End** text box enter the last Identifier number in the range.
5. Enter the Access Code(s), if necessary, in the appropriate text boxes.
6. Click the **Save** button, and the new trunk routes will appear in the Trunks tree.

Editing the Trunks Database

To edit a level in the Trunks database, follow these steps:

1. Highlight the facility or trunk route in the Trunks database tree.
2. The chosen level will appear in the right-hand pane of the **Trunks Database** screen.
3. Make the desired changes, and click the **Save** button.

Note: Once a facility is created, the country field cannot be modified. If you need to change the country, you must delete that facility and create a new one with the correct country.

Deleting from the Trunks Database

When deleting a level from the Trunks database tree, **be aware** that all levels below the chosen level will be deleted as well.

To delete a level from the Trunks database tree, follow these steps:

1. Highlight the facility or trunk route in the Trunks database tree.
2. The chosen level will appear in the right-hand pane of the **Trunks Database** screen.
3. Click the **Delete** button, and a **Confirm Delete** message appears. Click **Yes** to delete, or **No** to cancel the delete.

Note: All levels subordinate to a deleted level will be also deleted!

UNDEFINED TRUNKS

Incoming or outgoing calls that don't have a corresponding Trunk Route ID and/or an invalid Trunk Member ID in the CDR stream and in the Trunks database are considered undefined. How the system processes these undefined calls depends if the Auto Add Trunks and Gateways feature is turned on or off at the **Define Data Source** screen. This screen appears during the installation process and it is also accessible from the System Configuration utility.

To access the **Define Data Source** screen in the System Configuration utility, perform the following:

1. At the **Control Center**, click **Administration** → **System Configuration options**, and the **System Configuration** screen will appear.
2. There, scroll through the list and click **Data Source**.
3. Since you can turn the Auto Add feature on or off for individual data sources, select the desired data source from the **Data Source** drop-down list box.
4. Click the **Run** button and the **Define Data Source** screen will appear with the selected data source.
5. At the **Define Data Source** screen, click the **Auto Add Trunks and Gateways** check box to turn the feature on or off.

Note: The Auto Add feature is turned off by default when the system is being installed.

Auto Add Trunks and Gateways Disabled

If the Auto Add Trunks and Gateways feature is turned off at the **Define Data Sources** screen (the default setting), then undefined calls will not be stored or priced. To view these undefined Trunk Route/Member combinations, follow these steps:

To view these undefined Trunk Route/Member combinations, follow these steps:

1. In the **Trunks** database screen, click the **Help** menu.
2. Next, select the **Undefined Trunks** menu item.
3. The **Undefined Trunks** dialog box will appear.

In this dialog box, you will see the data source the call came in on as well as the trunk route and member IDs (separated by a period). In addition, the date the undefined trunk was discovered is displayed.

Note: The trunks are listed in the following format: XXX.YYY where trunks (XXX) and members (YYY) are separated by a period.

If you want to define the displayed IDs, follow these steps:

1. Add the Trunk Route and Member IDs to the Trunks database.
2. Reprocess the raw data in Background Services (Please refer to the **Reprocess Data** section [on page 9](#) for more information.).
3. Rerun the Undefined Trunks utility.
 - If you click the **Purge List** button, you will delete the undefined trunks information. Usually, this is done after the calls have been reprocessed, or if you decide not to reprocess the calls at all.
 - If you want to print the displayed information, click the **Print** button.

Auto Add Trunks and Gateways Enabled

If the Auto Add Trunks and Gateways feature is turned on at the **Define Data Sources** screen, then undefined calls will be added automatically to the Trunks database.

For each data source, a special facility will be created for undefined trunks. This facility will have the following characteristics:

- Facility name - "Default"
- Line ID - Tie
- Billing description - The installed tariff with its default pricing.

Note: The Default facility cannot be deleted nor can its name be changed.

REPROCESSING DATA

Raw call records are call records in the original format received from the PBX. The call accounting software stores raw call records for a period defined by the user at the **Define Purge Schedule** dialog box during installation.

Note: The reprocessing of rejected files can be automated by configuring the **[ReProcess]** section in the DataManager.ini file. Please refer to the **Collection and Processing PC Post-Installation Notes** section of the Self-Installation Guide for more information.

In certain cases, you may wish to reprocess the raw call records. In this case, the Reprocess Data function performs the following:

- Call records for the dates specified are purged from the call storage database
- Calls for the specified dates are processed and priced
- Calls for the specified dates are stored in the call storage database
- The reprocessing of rejected files can be done manually or in an automated fashion

Reprocessing Data Manually

To reprocess files manually, follow these steps:

1. At the **Call Acct. Service Mgr.** screen, click the isvProcess item in the list.
2. Next, click the **Custom** button and a dialog box will appear containing a series of buttons.
3. There select **ReProcess**, and a **Select one or more files** dialog box will appear.
4. From the **Data Source** list box, select the data source for the raw file or files you want to reprocess. If the number of data sources exceeds the maximum number defined at the **Misc. System Options 1** screen during installation, then a **Find Word(s)** text box and **Word Search** button will appear. There, perform a search for the data source, and the results will appear in the **Data Source** list box. Enter your search string in the **Find Word(s)** text box. You don't have to enter an entire word, just a fragment. After entering a search string, Click the **Word Search** button, and the search results will include all values containing your search string.

For example, if you enter a search string of "at", your results will include the following:
cathode, flat screen, gateway.

Note: The **Find Word(s)** text box and **Word Search** button will appear only if the number of data sources exceeds the maximum number defined at the **Misc. System Options 1** screen during installation.

5. Select the desired file(s).
 - To select more than one sequential file, highlight the first file in the series by clicking on it, and while holding down the **SHIFT** key, click the last file in the series.
 - If the files are not sequential, select each file while holding down the **CTRL** key.
6. Click the **OK** button.

Reprocessing Rejected Files Automatically

To configure the automated reprocessing of rejected files, perform the following:

1. Locate the DataManager7.ini template file and DataManager.ini file in the InfortelSelect\Programs directory.
2. Open the DataManager7.ini template file and copy the following two lines from the **[Reprocess]** section into your DataManager.ini file's **[Reprocess]** section. If **[Reprocess]** section does not exist in your DataManager.ini file, then create one:
 - DaysOfWeek=0111110
 - Time=0200
3. In the DataManager.ini file, replace the DaysOfWeek value 0111110 with the desired days of the week that the automated reprocessing should apply to. Each number in the value represents a day of the week starting with Sunday and ending with Saturday. A "0" indicates that automated reprocessing of rejected files should not occur on a day of the week and a "1" indicates that it should.

Note: To turn off automated reprocessing of rejected files, simply set the DayofWeek value to all zeroes.
4. In the DataManager.ini file, replace the Time value 0200 with the desired time that automated reprocessing should start. This time should be given in military format and in hours and minutes. For example, a value of 2345 would represent 11:45 PM.
5. Save and close the DataManager.ini file.



ISI Telemangement Solutions, Inc.

1051 Perimeter Drive
Suite 200
Schaumburg, IL 60173
Phone: (847)995-0002
Fax: (847)995-0003
www.isi-info.com