



Using Chinese Characters in Business Tags

Prime Network Vision lets you attach business tags (customer labels) to the following network objects using traditional and simplified Chinese characters:

- Location
- Node name
- Router name
- Map aggregation

The following business tag functions support Chinese characters:

- Creating business tags for network objects
- Searching for business tags
- Generating a list of business tags
- Editing business tag details
- Removing business tags
- Exporting business tags through the northbound interface (NBI)
- Writing business tag notes

Complete the following sections to use Chinese characters with Prime Network.

Using Chinese Characters with Oracle

If you are using Chinese characters, make sure the database parameter `NLS_CHARACTERSET` is set to a value that supports UTF8. Otherwise, Chinese characters will not display correctly after you install or upgrade to Prime Network 4.3.1.

Step 1 Stop Cisco Prime Network before changing the character set of your database.

```
networkctl stop
```

Step 2 To check the value of the `NLS_CHARACTERSET` parameter, enter the following SQL*PLUS command:

```
sql> SELECT parameter, value FROM v$nls_parameters WHERE parameter='NLS_CHARACTERSET';
```

If the value is UTF8 or AL32UTF8, no further action is required.

Step 3 Check the `job_queue_processes` and `aq_tm_processes` parameters and record the current values (you will restore them later in this procedure). Complete the following steps:

- a. To check the `job_queue_processes` value, enter the following command:

```
SQL> show parameter job_queue_processes
```

In the command output, you should see:

NAME	TYPE	VALUE
-----	-----	-----
job_queue_processes	integer	10

- b. To check the `aq_tm_processes` value, enter the following command:

```
SQL> show parameter aq_tm_processes
```

In the command output, you should see:

NAME	TYPE	VALUE
-----	-----	-----
aq_tm_processes	integer	0

Step 4 Use the Oracle CSALTER script to change the character set to UTF8 or AL32UTF8. The CSALTER script is part of the Oracle Database Character Set Scanner utility. Complete the following steps to change the database character set. For details, see the *Oracle Database Globalization Support Guide*, section “Migrating a Character Set Using the CSALTER Script.”

- Use either a **SHUTDOWN IMMEDIATE** or a **SHUTDOWN NORMAL** statement to shut down the database.
- Perform a full backup of the database (the CSALTER script cannot be rolled back). See the *Cisco Prime Network 4.3.1 Administrator Guide* for database backup procedures.
- Start the database.
- Run the Oracle Database Character Set Scanner utility (the `csscan` script). The new character set must be UTF8 or AL32UTF8.
- Run the CSALTER script.
- Use either a **SHUTDOWN IMMEDIATE** or a **SHUTDOWN NORMAL** statement to shut down the database.
- Start the database.

Step 5 If the CSALTER script returns the error “Sorry, only one session is allowed to run this script,” do the following:

- Log into the database with SQL*PLUS.
- Use a **SHUTDOWN IMMEDIATE** statement to shut down the database.
- Use **startup restrict** to start the database instance in restricted mode.
- Rerun the CSALTER script.

Step 6 Enter the following commands to restore the values that you recorded in [Step 3](#) for the `job_queue_processes` and `aq_tm_processes` parameters:

```
sql> alter system set job_queue_processes=10 SCOPE=BOTH; # value
sql> alter system set aq_tm_processes=0 SCOPE=BOTH; # value
```

Step 7 Start Prime Network:

```
networkctl start
```

Using Chinese Characters with Windows Clients

If you are using Chinese characters, East Asian languages must be installed on the Windows client workstation (where the Prime Network clients are installed). Also, the regional options must support Chinese.

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- Step 1** In the Windows Control Panel, choose **Regional and Language Options**.
 - Step 2** Click the **Languages** tab.
 - Step 3** Insert the Windows CD.
 - Step 4** Check the **Install files for East Asian languages** check box.
 - Step 5** Click **OK**.
 - Step 6** Reopen the Windows Control Panel and choose **Regional and Language Options**.
 - Step 7** Click the **Regional Options** tab.
 - Step 8** In the drop-down list, choose **Chinese (PRC)**.
 - Step 9** Click **OK**.
 - Step 10** Restart your Windows client workstation.
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Displaying Chinese Characters in the GUI

If Chinese characters are not displayed correctly in the GUI, it is because the **synth.xml** file contains a physical font (such as Tahoma) that does not support Chinese characters.

To modify the synth.xml file:

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- Step 1** Navigate to the `$NETWORKHOME/Main/webstart/jars/xmp-laf` directory and open the Cues.jar file.
 - Step 2** Modify the synth.xml file as follows:
 - a. Access the synth.xml file from the directory, `com/cisco/plaf`.
 - b. Change all instances of “font name=” and/or “font id=” to the desired font. In the below example, the font is set to “Tahoma”.



Note Prime Network was tested with the “Dialog” font.

```
<style id="default">
<object id="graphicsUtils" class="com.cisco.plaf.CUESGraphicsUtils"/>
<graphicsUtils idref="graphicsUtils"/>

<object id="syntheticaPainter"
class="de.javasoft.plaf.synthetica.painter.SyntheticaPainter"/>
```

```

<state>
<!-- CUES: <font id="SyntheticaDefaultFont" name="Segoe UI" size="12"/>
<color type="FOREGROUND" value="#333333"/>-->
<font id="SyntheticaDefaultFont" name="Tahoma" size="11"/>
<color type="FOREGROUND" value="#222222"/>
</state>

```

Step 3 To change the font on the title pane, do the following:

```

<style id="internalFrameTitlePane">
  <imageIcon id="internalFrameCloseIcon"
path="/com/cisco/plaf/images/closeIcon.png"/>
  <imageIcon id="internalFrameMaximizeIcon"
path="/com/cisco/plaf/images/maximizeIcon.png"/>
  ....

  <state>
<property key="InternalFrameTitlePane.closeIcon" value="internalFrameCloseIcon"/>
<property key="InternalFrameTitlePane.minimizeIcon" value="internalFrameMinimizeIcon"/>
<property key="InternalFrameTitlePane.maximizeIcon" value="internalFrameMaximizeIcon"/>
<property key="InternalFrameTitlePane.iconifyIcon" value="internalFrameIconifyIcon"/>

    <!-- <font name="Tahoma" size="11" style="BOLD" /> -->
    <!-- CUES: <font name="Tahoma" size="14" style="PLAIN"/> -->
    <!-- <font name="Tahoma" size="13" style="BOLD"/> -->
    <font name="Tahoma" size="13" style="BOLD"/>

```

Step 4 Save and exit the `synth.xml` file.
