

Product Support Notice

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Severity/risk level Medium Urgency

When convenient

Name of problem

Daylight Saving Time rules and Time Zone changes for Avaya Aura® Communication Manager.

Products affected

Avaya Aura® Communication Manager (CM), Releases 5.0 – 6.3

Avaya Aura® Solution for Midsize Enterprise, Releases 6.x.x

S8300 Server

S8510 Server

S8800 Server

Common Servers (HP & Dell)

Problem description

Localities worldwide routinely adjust their Daylight Saving Time (DST) rules. Communication Manager can automatically adjust for Daylight Saving Time based on the built-in DST rules for each locality. The DST rules are defined by the version of the "tzdata" Linux RPM included in the software. If there is a change in these rules for a particular locality, Communication Manager may require software updates.

This PSN has been updated for recent DST changes in Turkey, to be enacted in November 2015 and beyond.

Resolution

Patches for the October/November 2015 and beyond Turkey DST changes are available:

For CM 5.2.1 apply CM over-writable patch 22626.

For CM 6.0.1 apply CM over-writable patch 22629.

For CM 6.2.x apply CM over-writable patch 22621.

For CM 6.3.x apply CM over-writable patch 22628.

These patches include tzdata versions tzdata-2015g-1.el5.i386.rpm for CM 6.x and tzdata-2015g-1.el4.noarch.rpm for CM 5.2.1 https://access.redhat.com/solutions/1753573

NOTE: Do not deactivate any existing CM patches or service packs running on the system before activating the above patches. These patches are over-writable patches and designed to be activated on top of currently activated CM patches/SPs.

NOTE: After the patch is activated, the Linux Time Zone on the System Management Interface (SMI) web pages on a CM 5.2.1 server should be set to a different time zone, and then set back to the correct time zone (toggled). There is no need to perform the time zone toggle on CM 6.x.x servers. After this, a full Linux reboot is required for the patch/changes to take affect! All CM versions (5.2.1 and 6.x.x) require a full Linux reboot.

NOTE: If applying DST patches on CM 6.x.x. systems, System Platform must be remediated first. Please refer to PSN027024 to remediate System Platform for DST changes in Turkey prior to remediating CM.

NOTE: Once activated these patches cannot be removed. The deactivate step will succeed, but the new DST rules will not be removed.

Workaround or alternative remediation

In some cases, Communication Manager patches may not be available to accommodate support of changing Daylight Saving Time start and end dates. The manual procedures may be the only option for older Communication Manager releases which are beyond End Of Manufacturer Support (EOMS) and do not have patches available. The following instructions show how to manually make DST rule changes on CM releases lower than 6.x.x (prior to System Platform).

The Following steps must be followed in the exact order specified to be used as a manual procedure for servers running releases of Communication Manager that do not have a Daylight Saving Time patch available or have not upgraded to a release of Communication Manager with the required DST rules:

Manual Procedure to Change Time for Start of Daylight Saving Time:

- 1. For duplicated server pairs, start with the stand-by Server first. After completion of the time-change on the stand-by server, interchange servers and perform the same steps to change the time on the other server.
- 2. If Daylight Saving Time rules other than 0 (zero) are being used in the *daylightsavings-rules* SAT form, these rules must be updated via the SAT to appropriately reflect the new Daylight Saving Time changes/adjustments.
- 3. After the Daylight Saving Time start date per the new rules occurs:
 - a. If the Server is synchronizing to a network time server, use the following steps to disable synchronization.
 NOTE: Once synchronization with a network time server is disabled it is possible to experience clock drift on the Communication Manager server. Clock drift occurs when the time on the server slowly deviates or drifts from the correct time. If the clock drift becomes too great the server time should be set to the correct time manually (see below for instructions on setting the time manually).
 - i. Select **Configure Server** from the Maintenance Web Interface (also known as System Management Interface SMI).
 - ii. Click the Continue button to proceed until a Configure individual services radio button is available.
 - iii. Select the **Configure individual services** radio button and click the **Continue** button.
 - iv. Select Configure Time Server.
 - Copy the IP address or host name of the network time server to a safe place. This is needed when the synchronization to the network time server is enabled again. Select the **This computer synchronizes with the duplicated server** radio button on duplicated servers and the **Use Local Clock** radio button on non duplicated servers. It is important to note that these choices might be different depending on the release of Communication Manager Software. As long as the choice other than **Use these Network Time Servers** is selected, meaning the **Use these Network Time Servers** radio button is **NOT selected**, the synchronization with network time servers will be disabled.
 - vi. Click the **Change** button and a success message should be displayed.
 - vii. Click the Close window button.
 - b. Manually set the server time to be correct.

NOTE: When setting the time manually via the Maintenance Web Interface on Servers running Communication Manager 3.1.2 there is a known issue that can cause the server to perform a reset! To fix this known issue contact your technical support organization and request patch 12768 or any combo patch or Service Pack (Service Pack 12866 or later 3.1.2 Service Packs) containing it.

- i. Select **Server Date/Time** from the Maintenance Web Interface.
- ii. Set the time on the server to the correct time for Daylight Saving Time and click the Submit button.

REPEAT THIS PROCEDURE ON THE SECOND SERVER OF DUPLICATED SERVER PAIRS!

REPEAT THIS PROCEDURE ON ANY ESS or LSP SERVERS ALSO AFFECTED BY THE DST EXTENSION!

No further changes are required until after the Daylight Saving Time start date using the old rules occurs. **NOTE:** Do NOT enable synchronization with the network time server during this interval.

4. After the Daylight Saving Time start date using the old rules occurs, the time is automatically adjusted forward one hour on the Server

NOTE: It is very important to let this transition occur and let the Server make the automated time adjustment before taking additional steps!

- a. At the appropriate time, the time will be set forward one hour automatically on the server. **NOTE:** At this point you cannot set the time back! You must wait one full hour after the time is automatically set forward before trying to manually set the time back! After waiting at least one hour, manually set the time to be correct.
 - **NOTE:** When setting the time manually via the Maintenance Web Interface on Servers running Communication Manager 3.1.2 there is a known issue that can cause the server to perform a reset! To fix this known issue contact your technical support organization and request patch 12768 or any combo patch or Service Pack (Service Pack 12866 or later 3.1.2 Service Packs) containing it.
 - i. Select **Server Date/Time** from the Maintenance Web Interface.
 - ii. Set the time on the server to the correct time for Daylight Saving Time and click the **Submit** button.
- b. If synchronization to a network time server was previously disabled in step 1, use the following steps to enable it. **NOTE:** When enabling synchronization to a network time server via the Maintenance Web Interface on Servers running Communication Manager 3.1.2 there is a known issue that causes the synchronization to fail! To fix this known issue contact your technical support organization and request patch 12868 or any combo patch or Service Pack containing it. If the patch is applied while synchronized to a network time server, the *Change* button on the *Configure Time Server* page must be clicked to activate the fix.
 - i. Select **Configure Server** from the Maintenance Web Interface
 - ii. Click the Continue button to proceed until a Configure individual services radio button is available
 - iii. Select the **Configure individual services** radio button and click the **Continue** button

- iv. Select **Configure Time Server**
- v. Select the **Use these Network Time Servers** radio button and provide the Network Time Server information.
- vi. Click the Change button and the message Successfully added NTP information should be displayed.
- vii. Click the Close window button.

REPEAT THIS PROCEDURE ON THE SECOND SERVER OF DUPLICATED SERVER PAIRS!

REPEAT THIS PROCEDURE ON ANY ESS or LSP SERVERS ALSO AFFECTED BY THE DST EXTENSION!

Manual Procedure to Change Time for End of Daylight Saving Time:

- 1. For duplicated server pairs, start with the stand-by Server first. After completion of the time-change on the stand-by server, interchange servers and perform the same steps to change the time on the other server.
- 2. If Daylight Saving Time rules other than 0 (zero) are being used in the *daylightsavings-rules* SAT form, and the rules were not previously changed/adjusted to appropriately reflect the new rules, they must be updated via the SAT.
- 3. After the Daylight Saving Time end date using the old rules occurs, the time is automatically adjusted back one hour on the Server.

NOTE: It is very important to let this transition occur and let the Server make the automated time adjustment before taking additional steps!

- a. If the Server is synchronizing to a network time server, use the following steps to disable synchronization.

 NOTE: Once synchronization with a network time server is disabled it is possible to experience clock drift on the S8xx0 series server. Clock drift occurs when the time on the server slowly deviates or drifts from the correct time. If the clock drift becomes too great the server time should be set to the correct time manually (see below for instructions on setting the time manually).
 - i. Select **Configure Server** from the Maintenance Web Interface.
 - ii. Click the **Continue** button to proceed until a **Configure individual services** radio button is available.
 - iii. Select the **Configure individual services** radio button and click the **Continue** button.
 - iv. Select Configure Time Server.
 - Copy the IP address or host name of the network time server to a safe place. This is needed when the synchronization to the network time server is enabled again. Select the **This computer synchronizes with the duplicated server** radio button on duplicated servers and the **Use Local Clock** radio button on non duplicated servers. It is important to note that these choices might be different depending on the release of Communication Manager Software. As long as the choice other than **Use these Network Time Servers** is selected, meaning the **Use these Network Time Servers** radio button is **NOT selected**, the synchronization with network time servers will be disabled.
 - v. Click the **Change** button and a success message should be displayed.
 - vi. Click the Close window button.
- b. Manually set the server time to be correct.
- **NOTE:** When setting the time manually via the Maintenance Web Interface on Servers running Communication Manager 3.1.2 there is a known issue that can cause the server to perform a reset! To fix this known issue contact your technical support organization and request patch 12768 or any combo patch or Service Pack (Service Pack 12866 or later 3.1.2 Service Packs) containing it.
 - i. Select **Server Date/Time** from the Maintenance Web Interface
 - ii. Set the time on the server to the correct time for Daylight Saving Time and click the **Submit** button.

REPEAT THIS PROCEDURE ON THE SECOND SERVER OF DUPLICATED SERVER PAIRS!

REPEAT THIS PROCEDURE ON ANY ESS OF LSP SERVERS ALSO AFFECTED BY THE DST EXTENSION!

No further changes are required until after the Daylight Saving Time end date, using the new rules occurs. **NOTE:** Do NOT enable synchronization with the network time server during this interval.

- 4. After the Daylight Saving Time end date using the new rules occurs, take the following steps
 - a. Manually set the time to be correct.
 - **NOTE:** When setting the time manually via the Maintenance Web Interface on Servers running Communication Manager 3.1.2 there is a known issue that can cause the server to perform a reset! To fix this known issue contact your technical support organization and request patch 12768 or any combo patch or Service Pack (Service Pack 12866 or later 3.1.2 Service Packs) containing it.
 - i. Select **Server Date/Time** from the Maintenance Web Interface.
 - ii. Set the time on the server to the correct time for Standard Time (non Daylight Saving Time) and click the **Submit** button.
 - b. If synchronization to a network time server was previously disabled in step 1, use the following steps to enable it.

NOTE: When enabling synchronization to a network time server via the Maintenance Web Interface on Servers running Communication Manager 3.1.2 there is a known issue that

causes the synchronization to fail! To fix this known issue contact your technical support organization and request patch 12868 or any combo patch or Service Pack containing it. If the

patch is applied while synchronized to a network time server, the *Change* button on the *Configure Time Server* page must be clicked to activate the fix.

- i. Select **Configure Server** from the Maintenance Web Interface.
- ii. Click the **Continue** button to proceed until a **Configure individual services** radio button is available.
- iii. Select the **Configure individual services** radio button and click the **Continue** button.
- iv. Select **Configure Time Server**.
- Select the Use these Network Time Servers radio button and provide the Network Time Server information.
- vi. Click the **Change** button and the message **Successfully added NTP information** should be displayed.
- vii. Click the Close window button.

REPEAT THIS PROCEDURE ON THE SECOND SERVER OF DUPLICATED SERVER PAIRS!

REPEAT THIS PROCEDURE ON ANY ESS or LSP SERVERS ALSO AFFECTED BY THE DST EXTENSION!

For CM releases 6.x.x running on System Platform, CM receives time, date and time zone information from System Platform. Note that CM uses its own RHEL tzdata rpm to apply DST rules from the time zone provided from System Platform. Therefore, CM time and time zone should only be changed from System Platform for CM 6.x.x releases.

Remarks

n/a

Patch Notes

The information in this section concerns the patch, if any, recommended in the Resolution above.

Backup before applying the patch

Always

Download

Service Packs can be downloaded from "support.avaya.com". Custom patches must be provided by Avaya Support.

Patch install instructions

Service-interrupting?

No

Patch activation instructions are available in the respective Implementing Avaya Aura Communication Manager document on "**support.avaya.com**". CM Service Pack/patch activation is service impacting on non-duplicated servers, and on all servers running CM 5.2 and lower releases. For duplicated servers running CM 5.2.1 and higher releases, SPs/patches can be activated in a connection preserving manner. Refer to PSN002589 for more information.

NOTE: Do not deactivate any existing CM patches or service packs running on the system before activating these DST patches. These patches are over-writable patches and designed to be activated on top of currently activated CM patches/SPs.

NOTE: After the patch is activated, the Linux Time Zone on the System Management Interface (SMI) web pages on a CM 5.2.1 server should be set to a different time zone, and then set back to the correct time zone (toggled). There is no need to perform the time zone toggle on CM 6.x.x servers. After this, a full Linux reboot is required for the patch/changes to take affect! All CM versions (5.2.1 and 6.x.x) require a full Linux reboot.

NOTE: If applying DST patches on CM 6.x.x. systems, System Platform must be remediated first. Please refer to PSN027024 to remediate System Platform for DST changes in Turkey prior to remediating CM.

Verification

Patch activation instructions include verification instructions.

Failure

Contact Technical Support.

Patch uninstall instructions

Patch activation instructions include deactivation instructions.

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NOTE: Once activated these patches cannot be removed. The deactivate step will succeed, but the new DST rules will not be removed.

Security Notes

The information in this section concerns the security risk, if any, represented by the topic of this PSN.

Security risks

n/a

Avaya Security Vulnerability Classification

Not Susceptible

Mitigation

n/a

If you require further information or assistance please contact your Authorized Service Provider, or visit support.avaya.com. There you can access more product information, chat with an Agent, or open an online Service Request. Support is provided per your warranty or service contract terms unless otherwise specified in the Avaya support Terms of Use.

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