



Prepare for Migration

- [Introduction, on page 1](#)
- [CCE Features Readiness, on page 1](#)
- [CCE Scripting Readiness, on page 13](#)
- [Agent Desktop Readiness, on page 14](#)
- [Reporting Readiness, on page 15](#)
- [Outbound Readiness, on page 15](#)
- [Self Service Readiness, on page 15](#)
- [ECE Readiness, on page 17](#)

Introduction

Packaged CCE, although more simplified, requires certain preconditions to be met. Some of these preconditions are deploying all the solution components like Cisco Unified Intelligence Center, IdS, Live Data even if you do not use them in the existing Unified CCE deployment and strict naming conventions for Peripheral Gateways and Routing Clients. Following is a list of mandatory readiness checks and corrective actions you must perform in the Unified CCE deployment before migrating to Packaged CCE.

CCE Features Readiness

Check for Unsupported PGs

Ensure that your Unified CCE system only includes PGs that Packaged CCE supports (as per the Packaged CCE Reference Layout). For details on the Packaged CCE reference layouts, see the *Solution Design Guide for Cisco Packaged Contact Center Enterprise* at <https://www.cisco.com/c/en/us/support/customer-collaboration/packaged-contact-center-enterprise/tsd-products-support-series-home.html>

Procedure

- Step 1** Packaged CCE supports only the CUCM, VRU, and MR PGs. All other PGs and their associated resources like Services, Skill Groups should be removed before migration.

- a) Use the following query to check if your current deployment contains a PG type that is not supported by Packaged CCE:

```
select * from Logical_Interface_Controller where LogicalControllerType = 2 and ClientType
NOT IN (30,13,47,12)
```

- 30= Enterprise Agent
- 13= VRU
- 47 = Media Routing
- 12= Avaya DEFINITY ECS (EAS)

For more details, see the *Database Schema Handbook for Cisco Unified ICM/Contact Center Enterprise* at https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cust_contact/contact_center/icm_enterprise/icm_enterprise_12_0_1/Reference/Guide/ucce_b_1201-database-schema-guide.pdf

- b) Remove all associated configuration and script references.

Step 2 If you use Generic PG, do the following to modify the Generic PG to a VRU PG:

- a) Add a new CUCM PG. See [Split Generic PG to CUCM PG and VRU PG, on page 2](#).
- b) Install CUCM PG. See [Install the CUCM PG, on page 3](#).
- c) Modify Generic PG to VRU PG. See [Convert Generic PG to VRU PG using Peripheral Gateway Setup, on page 4](#).

Split Generic PG to CUCM PG and VRU PG

Procedure

Step 1 In the **Configuration Manager** window, expand **Tools > Explorer Tools**.

Step 2 Open **PG Explorer**.

Step 3 Click **Add PG** and then enter the following values in the **Logical Controller** pane:

- In the **Name** field, enter **CUCM_PG**.
- For **Client type**, choose **CUCM**.
- Enter **Primary CTI Address** and **Secondary CTI Address** as mentioned in the generic PG.

Step 4 Delete the peripheral that was automatically created in the previous step.

Step 5 Click **Save**.

Step 6 Drag the CUCM peripheral from the Generic PG to the CUCM PG.

A message appears asking if you are sure you want to move the peripheral to a different PG. Click **Yes** to confirm.

Step 7 Rename the Generic PG to VRU PG and change the Client type to **VRU**.

Step 8 Click **Save**.

Note Make sure to record the Logical Controller ID of the new CUCM PG. You need to enter it when you install the PG.

Install the CUCM PG

Procedure

- Step 1** Add a new CUCM PG alongside the Generic PG on both Side A and Side B VMs of the Generic PG machine. On the CUCM PG, choose **Start > All Programs > Unified CCE Tools > Peripheral Gateway Setup**.
- Step 2** In the **Instance Component** section, click **Add**.
- Step 3** Click **Peripheral Gateway**.
- Step 4** In the **Peripheral Gateways Properties** dialog, do the following:
- Check the **Production Mode** check box.
 - Check the **Auto start at system start up** check box.
 - Check the **Duplexed Peripheral Gateway** check box.
 - From the **PG Node Properties ID** drop-down list, select **PG3**.
 - Select the appropriate side (Side A or Side B).
 - In the **Client Type Selection** section, add **CUCM** to the Selected Types.
 - Click **Next**.
- Step 5** In the **Peripheral Gateway Managers** section of the **Peripheral Gateway Component Properties** dialog box, click **Add**.
- Step 6** Select **CUCM** and **PIMI** and click **OK**.
- Step 7** Check the **Enabled** check box.
- Step 8** In the **Peripheral Name** field, enter **CM**.
- Step 9** In the **Peripheral ID** field, enter the Peripheral ID that the system generated in Step 8 after the CUCM PG was added.
- Step 10** In the **Agent Extension Length** field, enter the extension length for this deployment.
- Step 11** In the **CUCM Parameters** section, do the following:
- In the **Service** field, enter the hostname of the Unified Communications Manager Subscriber.
 - In the **User ID** field, enter **pguser**.
 - In the **User Password** field, enter the password of the user that will be created on Unified Communications Manager.
 - In the **Mobile Agent Codec** field, choose either **G711 ULAW/ALAW** or **G.729**.
- Step 12** Click **OK**.
- Step 13** In the **Logical controller ID** field, enter the Logical controller ID of the CUCM PG that you created previously in PG Explorer.
- Step 14** In the **CTI Call Wrapup Data delay** field, enter 0. Click **Next**.
- Step 15** In the **Device Management Protocols Properties** dialog box, do the following:
- For Side A PG:
 - Select **Side A preferred**.

- For Side A properties, select **CallRouter is local**.
 - For Side B properties, select **CallRouter is remote (WAN)**.
- b) For Side B PG:
- Select **Side B preferred**.
 - For Side A properties, select **CallRouter is remote (WAN)**.
 - For Side B properties, select **CallRouter is local**.
- c) For both sides:
- Accept the default in the Usable Bandwidth (kbps) field.
 - Accept the default in the Heartbeat Interval (100ms) field.
- d) Click **Next**.

Step 16 In the **Peripheral Gateway Network Interfaces** dialog box, complete the interface fields:

- a) Enter the Private and Visible network interface hostnames. For the PG, use the same hostnames for private and private high. For the Router, enter the hostname of the Unified CCE Rogger Side A for the Router visible A and Router visible A high interfaces. Enter the hostname of the Unified CCE Rogger Side B for the Router visible B and Router visible B high interfaces.
- b) For the Side A PG, in the **Private Interfaces** section, click **QoS**. Check **Enable QoS** and click **OK**.
- c) For both the Side A and Side B PGs, in the **Visible Interfaces** section, click **QoS**. Check **Enable QoS** and click **OK**.
- d) Click **Next**.

Step 17 In the **Check Setup Information** dialog box, click **Next**.

Step 18 In the **Setup Complete** dialog box, click **Finish**.

Convert Generic PG to VRU PG using Peripheral Gateway Setup

Procedure

- Step 1** Open Peripheral Gateway Setup.
- Step 2** Select **PG**.
- Step 3** Click **Edit**.
- Step 4** In the **Client Type Selection** section, remove **CUCM**.
- Step 5** Click **Next**.
- Step 6** In the **Peripheral Gateway Component Properties** dialog box, remove the CUCM PIMs that were used for connecting to CUCM and click **Next**.
- Step 7** In the **Device Management Protocol Properties** dialog box, click **Next**.
- Step 8** In the **Peripheral Gateway Network Interfaces** dialog box, enter the hostname or IP address of the Unified CCE Rogger Side A for the Router visible A and Router visible A high interfaces. Enter the hostname or IP address of the Unified CCE Rogger Side B for the Router visible B and Router visible B high interfaces.

- Step 9** Click **Next**.
- Step 10** In the **Check Setup Information** dialog box, click **Next**.
- Step 11** Check the **Yes, start the Unified ICM/CC Node Manager** check box and click **Finish**.

Naming Conventions in Packaged CCE

Packaged CCE mandates naming conventions for PGs. Before migration, modify the entries of the EnterpriseName column in three tables to match the naming conventions: Logical_Interface_Controller, Peripheral, and Routing_Client.

For example, in a 2000 agent deployment, an existing CUCM PG in the Logical_Interface_Controller table should be renamed to CUCM_PG if it is meant to be added to the main site for administration through Unified CCE Administration or it could be renamed to Boston_UCM_PG if it is to be added to a remote site called "Boston".

To rename an existing PG, use the PG Explorer. For the step-by-step procedure, see [Rename CCE Components, on page 8](#).

Naming conventions for PG names in the Peripheral table and Routing_Client table differ from the naming conventions for the Logical_Interface_Controller table as shown in the following tables.

Naming Conventions in a 2000 Agent Deployment Type

Table Name	Naming Convention	Example
Logical Interface Controller table	Main Site: <PG_TYPE>_PG Remote Site: <REMOTE_SITE_NAME>_<PG_TYPE>_PG <PG_TYPE> will be different depending on whether the PG is an Agent PG or VRU PG or MR PG. The values are described in the following rows.	
	<PG_TYPE> value for Agent PG is CUCM.	Main Site: CUCM_PG Remote Site: RemoteSite_CUCM_PG
	<PG_TYPE> value for VRU PG is CVP.	Main Site: VRU_PG Remote Site: RemoteSite_VRU_PG
	<PG_TYPE> value for MultiChannel PG is MR.	Main Site: MR_PG Remote Site: RemoteSite_MR_PG

Table Name	Naming Convention	Example
Peripheral table and Routing Client table	<p>Main Site: <PG_TYPE>_PG</p> <p>Remote Site: <REMOTE_SITE_NAME>_<PG_TYPE>_PG<X></p> <p>where, <PG_TYPE> will be different depending on whether the PG is an Agent PG or VRU PG. The values are described in the following rows. The naming conventions for the Multichannel peripherals are different and are described below.</p> <p><REMOTE_SITE_NAME> is the name of the Remote Site.</p> <p><X> is a unique identifier to differentiate the peripheral from the rest in a PG.</p>	
	<p><PG_TYPE> value for Agent PG is CUCM.</p>	<p>Main Site: CUCM_PG</p> <p>Remote Site: RemoteSite_CUCM_PG_1</p>
	<p><PG_TYPE> value for CVP PG is CVP.</p>	<p>Main Site: CVP_PG</p> <p>Remote Site: RemoteSite_CVP_PG_1A</p>
	<p>Each MR PG should have 3 multichannel peripherals / routing clients which must adhere to the following naming convention:</p> <p>Main Site: Multichannel<X></p> <p>Remote Site: <REMOTE_SITE_NAME>_Multichannel<X></p> <p>Here, <X> will be either empty or can be '2' or '3'.</p>	<p>Main Site: Mutlichannel, Mutlichannel2, Mutlichannel3</p> <p>Remote Site: RemoteSite_Mutlichannel, RemoteSite_Mutlichannel2, RemoteSite_Mutlichannel3</p>
	<p>MR peripherals in Remote Sites that connect to the dialer for outbound should include the suffix "_Outbound".</p>	<p>Main Site: Outbound</p> <p>Remote Site: RemoteSite_Outbound</p>

Naming Conventions in 4000 and 12000 Agent Deployment Type

Table Name	Naming Convention	Example
Logical Interface Controller table	<p><SITE_NAME>_<PS_NAME>_<PG_TYPE>_PG</p> <ul style="list-style-type: none"> • <SITE_NAME> will be 'Main' for main site or the name of the remote site. • <PS_NAME> will be the name of the Peripheral Set. • <PG_TYPE> will be different depending on whether the PG is an Agent PG or VRU PG or MR PG. The values are described in the following rows. 	
	<p><PG_TYPE> value for Agent PG is UCM.</p>	<p>Main Site: Main_PS3_UCM_PG Remote Site: RemoteSite1_PS3_UCM_PG</p>
	<p><PG_TYPE> value for CVP PG is VRU.</p>	<p>Main Site: Main_Ps3_VRU_PG Remote Site: RemoteSite3_PS5_VRU_PG</p>
	<p><PG_TYPE> value for Multichannel PG is MR.</p>	<p>Main Site:Main_Ps3_MR_PG Remote Site:RemoteSite1_PS4_MR_PG</p>
		<p>Main Site:Main_PS1_Outbound</p>

Table Name	Naming Convention	Example
Peripheral table and Routing Client table	<p><SITE_NAME>_<PS_NAME>_<PG_TYPE>_PG<NUM></p> <ul style="list-style-type: none"> • <SITE_NAME> will be 'Main' for main site or the name of the remote site. • <PS_NAME> will be the name of the Peripheral Set. • <PG_TYPE> will be different depending on whether the PG is an Agent PG or VRU PG or MR PG. The values are described in the following rows. • <NUM> can be the identifier of the Peripheral / Routing client within the PG. 	
	<p><PG_TYPE> value for Agent PG is "CUCCM" for Main Site and "UCM" for remote sites.</p>	<p>Main Site: Main_PS6_CUCCM_PG12</p> <p>Remote Site: RemoteSite3_PS7_UCM_PG11</p>
	<p><PG_TYPE> value for CVP PG is VRU.</p>	<p>Remote Site: RemoteSite3_PS5_VRU_PG, RemoteSite1_PS4_VRU_PG11,</p>
	<p><PG_TYPE> value for Multichannel PG is MR.</p> <p>MR PGs should have 3 multichannel peripherals whose Enterprise Names end with MR1, MR2 and MR3.</p> <p><SITE_NAME>_<PS_NAME>_MR<X> where <X> is either 1, 2 or 3.</p>	<p>Main Site: Main_PS3_MR3</p> <p>Remote Site: RemoteSite3_PS5_MR1, RemoteSite1_PS4_MR2</p>
	<p>MR peripherals that connect to the dialer for outbound should include the suffix "_Outbound"</p>	<p>Main Site: Main_PS1_Outbound</p>

Rename CCE Components

Follow this procedure to rename the logical interface controller, peripheral, and routing client as per the naming conventions of Packaged CCE.

Procedure

-
- Step 1** In the Configuration Manager on the AW machine, open **Explorer Tools > PG Explorer**.
 - Step 2** Click **Retrieve**.
 - Step 3** To change the name of the logical controller, in the **Logical Controller** tab, enter the new name in the **Name** field.
 - Step 4** To change the name of the peripheral, in the **Peripheral** tab, enter the new name in the **Name** field.
 - Step 5** To change the name of the routing client, in the **Routing Client** tab, enter the new name in the **Name** field.

- Step 6** Click **Save**.
After you rename the logical interface controller, peripheral, and the routing client, all historical reports pertaining to the peripherals display the updated names as expected.
-

Strict Enforcement of Configuration and Capacity Limits in Packaged CCE

Packaged CCE has strict enforcements on the configuration limits defined in the Packaged CCE reference designs. If the configuration limits of your Unified CCE system was tweaked using the `ConfigLimit.exe` utility after consulting with Cisco, please note that these tweaked limits will not be supported in Packaged CCE deployments. PCCE tracks the resources continuously and does not allow you to add or update the configuration elements unless they match or do not exceed the configuration limits defined in the Packaged CCE reference designs.

Another strict enforcement is with the maximum concurrent logged-in agents in the system. Any agent login beyond the limits defined in the 2000 agent Packaged CCE reference design is denied in Packaged CCE. This enforcement does not apply to 4000 agent and 12000 Packaged CCE reference designs.

For details on the reference designs, see the *Solution Design Guide for Cisco Packaged Contact Center Enterprise* at <https://www.cisco.com/c/en/us/support/customer-collaboration/packaged-contact-center-enterprise/tsd-products-support-series-home.html>.

2000 Agent Reference Design Compliance

Packaged CCE 2000 Agent Reference Design is supported on the Cisco UCS C240 M5SX servers and the Cisco Hyperflex C240 M5SX servers.

Packaged CCE 12.0 provides TRC support for the Cisco UCS C240 M5SX Large TRC servers and spec-based support for Hyperflex (M4 or HX220c M5SX). For more details, see the *Virtual Machines Resource Provisioning Policy* section of the *Solution Design Guide for Cisco Packaged Contact Center Enterprise* at <https://www.cisco.com/c/en/us/support/customer-collaboration/packaged-contact-center-enterprise/tsd-products-support-series-home.html>.

Based on your business and deployment requirements, you may choose the Cisco UCS C240 M5SX servers or the Cisco Hyperflex C240 M5SX servers.

The following sections provide the Reference Design VM layouts of the Packaged CCE 2000 Agent Deployment on the Cisco UCS C240 M5SX servers and the Cisco Hyperflex C240 M5SX servers. The sections also list the VM specifications of all the CCE components such as Rogger, CM, CVP, Finesse, VVB, PG, and more.

Irrespective of whether you choose a UCS server or a Hyperflex server, you must distribute your component VMs as depicted in the Reference Design layout of that server. Also, set the specifications of VMs such as CPU reservation, RAM, memory reservation, and disk size to the recommended values.

Modify your current VM layout and VM specifications before migration in compliance with the Packaged CCE 2000 Agent Reference Designs.

Compliance with the Reference Design also ensures that all the required core CCE components are present in your Packaged CCE deployment.

2000 Agent Reference Designs

- In this Reference Design, Cisco Unified Intelligence Center, Live Data, and the Identity Service for Single Sign-On are coresident on a single VM. In the larger Reference Designs, they reside in separate VMs.

- You can optionally deploy the Unified Communications Manager Publisher and Subscribers on separate servers, instead of deploying them as shown in the 2000 Agent Reference Design layout. You should dedicate two of the subscribers to Unified CCE. All devices on these subscribers must be SIP.

In 2000 Agent Reference Designs, a coresident Unified CM can support a maximum of 2000 phones. This includes your phones for all types of agents, whether contact center agents or back-office workers. If your solution requires more than 2000 phones, use a Unified CM on a separate server instead.

- In the global deployment topology, each remote site can have its own Unified CM cluster. A remote site cannot include a Cisco Unified Intelligence Center server.
- In Packaged CCE global deployments, you cannot create a remote site without PG VMs.
- You can deploy optional AW-HDS-DDS per site on external servers for longer data retention.
- In 2000 Agent Reference Designs, you can deploy ECE Data Server on-box for up to 400 agents. Deploy ECE off-box for up to 1500 agents.

You can also deploy the ECE Data Server on a separate server.

- Deploy the ECE Web Server on an external server. You can place that server either in the same data center as the ECE Data Server or in a DMZ if customer chat interactions require that.
- If you select M3/M4 Tested Reference Configuration, the system checks if the hardware is supported UCS hardware and verifies if the VMs are configured as per the reference design. If the validation is successful, the Credentials page opens.
- If you select M5 Tested Reference Configuration/Specification Based Configuration, the system validates the hardware specifications of the VMware host and verifies if the VMs are configured as per the reference design.
- VM annotations are used to identify Packaged CCE core component VMs. Do not change the default annotations of any of the core component VMs. The following terms are reserved for core component annotations: Cisco, Cisco Finesse, CUIC, and CVP. Do not use these reserved terms in the annotations of any of the non-core component VMs. Packaged CCE core components include:
 - Unified CCE Rogger
 - Unified CCE AW/HDS/DDDS
 - Unified CCE PG
 - Unified CVP Server
 - Unified Intelligence Center Publisher (with coresident Live Data and IdS)
 - Cisco Finesse
- Core components must be on-box as depicted in the Reference Design layouts. Non-core components can be off box as external machines in the Packaged CCE Inventory. For more information, see the *Add External Machines* topic in the *Cisco Packaged Contact Center Enterprise Administration and Configuration Guide, Release 12.0(1)* at <https://www.cisco.com/c/en/us/support/customer-collaboration/packaged-contact-center-enterprise/products-maintenance-guides-list.html>
- Before you migrate Packaged CCE 12.0, remove the Cisco Operations Console (OAMP) VM. You may deploy the OAMP VM on external servers for future reference or as a backup.



Note Adding more disks is not permitted in the Packaged CCE 2000 agent deployment. Any changes to the number of disks will result in a VM validation error.

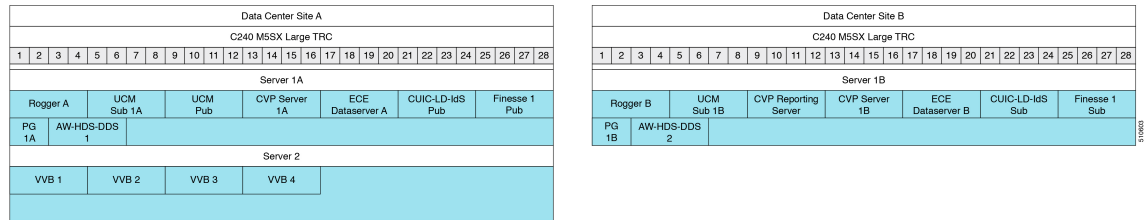
Support on the Cisco UCS C240 M5SX Large TRC Server



Important If you plan to upgrade to 12.x on Cisco UCS C240 M4SX servers, deploy Unified CM and ECE HA VMs on external servers.

The following figure shows the base layout of the components in a 2000 Agent Reference Design on Cisco UCS C240 M5SX Large TRC server.

Figure 1: 2000 Agent Reference Design Model



This table lists the specifications for VMs.

Table 1: VM Specifications for 2000 Agent Reference Design

VM	vCPU	MHz	vRAM	vDisk 1	vDisk 2	vDisk 3
Rogger	4	5000	6	80	150	
Unified CM	4	7200	8	110		
Unified CVP Server	4	3000	12	250		
Unified CVP Reporting Server	4	1800	6	80	438	
ECE Dataserver ¹	4	4000	20	80	50	300
CUIC-LD-IdS	4	5500	16	200		
AW-HDS-DDS	4	5000	16	80	750	
PG	2	4000	6	80		
Finesse	4	5000	10	146		
VVB	4	9000	10	146		

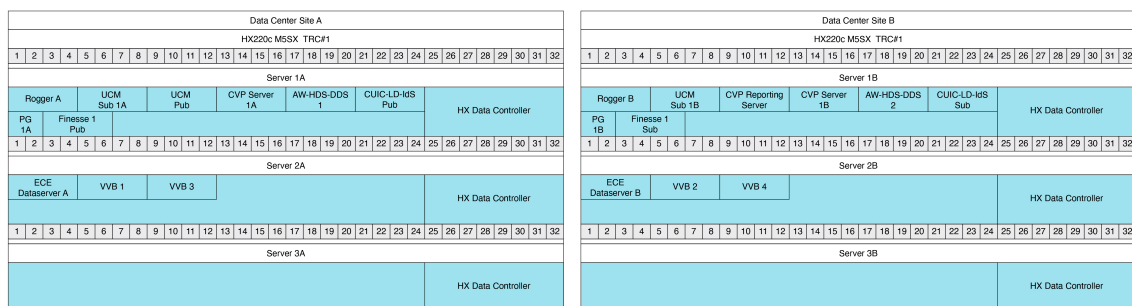
¹ For the latest VM specifications, see the row for 400 agents in the **Virtualization for Enterprise Chat and Email** page at https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/virtualization-enterprise-chat-email.html.

Table 2: Total VM Requirements for 2000 Agent Reference Design

Server	vCPU	MHz	vRAM	vDisk
Data Center Site A	34	45900	102	2386
Data Center Site B	30	40500	100	2648
Server 2	16	36000	40	584

Support on the Cisco HyperFlex HX220c M5 TRC Server

This figure shows the base layout of the components in a 2000 Agent Reference Design on Cisco HyperFlex HX220c M5 TRC servers.



This table lists the specifications for VMs.

Table 3: VM Specifications for 2000 Agent Reference Design

VM	vCPU	MHz	vRAM	vDisk 1	vDisk 2	vDisk 3
HX Data Controller	16	10800	48			
Rogger	4	5000	6	80	150	
Unified CM	4	7200	8	110		
Unified CVP Server	4	3000	12	250		
Unified CVP Reporting Server	4	1800	6	80	438	
ECE Dataserver ²	4	4000	20	80	50	300
CUIC-LD-IdS	4	5500	16	200		
AW-HDS-DDS	4	5000	16	80	750	
PG	2	4000	6	80		

VM	vCPU	MHz	vRAM	vDisk 1	vDisk 2	vDisk 3
Finesse	4	5000	10	146		
VVB	4	9000	10	146		

² For the latest VM specifications, see the row for 400 agents in the **Virtualization for Enterprise Chat and Email** page at https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/virtualization-enterprise-chat-email.html.

Table 4: Total VM Requirements for 2000 Agent Reference Design

Server	vCPU	MHz	vRAM	vDisk
Data Center Site 1A	46	52700	130	1956
Data Center Site 1B	46	47300	128	2364
Data Center Site 2A	28	32800	88	722
Data Center Site 2B	28	32800	88	722

Agent or Supervisor Logins Across Multiple Peripherals

Packaged CCE does not support agent or supervisor logins across multiple peripherals. Before migrating to Packaged CCE, restrict agent or supervisor logins to a single peripheral and ensure 1:1 mapping between an agent to person record.

Congestion Control Always Enabled in Packaged CCE

In Packaged CCE, Congestion Control is turned ON by default with the Treatment Mode set to 4, which is the equivalent of "Terminate with Dialog Fail /Route End." This setting cannot be disabled, nor can the treatment mode be changed.

CCE Scripting Readiness

Remove Unsupported Scripting Nodes in Unified CCE Scripts

Packaged CCE does not support the Scheduled Target node. You must remove the Scheduled Target node from your existing Unified CCE scripts before migration.

Script Node Level Access in Feature Control Set Unavailable

Packaged CCE provides role-based access to restrict access to features and gadgets in the Unified CCE Administration. It does internally use the Feature Control Set.

If your Unified CCE deployment employs a feature control set to restrict access to specific script nodes, then that option would be unavailable after migrating to Packaged CCE. Any pre-existing Feature Control Set

would be available in Unified CCE Administration as a custom role, without the ability to restrict access to scripting nodes.

Multiple Network VRUs not supported in Packaged CCE

Packaged CCE does not support multiple Network VRUs to manage prompts or different types of VRU routing mechanisms. The only VRU Packaged CCE supports is CVP configured as a Type 10 Network VRU.

If you currently employ multiple Network VRUs (defined in the Network VRU Explorer tool under Configuration Manager) associated with Network VRU scripts, consolidate all the VRU scripts under a single Network VRU.

Enterprise Skill Groups to Precision Queues

An enterprise skill group is a collection of skill groups (usually from different peripherals) that are used in routing scripts to target agents across the Unified CCE system. Although this functionality helps target agents at an enterprise level, it still is a collection of skill groups that are associated with individual peripherals, and therefore needs configuration and management of the underlying skill groups. An alternative to Enterprise Skill Groups is Precision Queues that allows you to target agents across the enterprise based on attributes that are defined for individual agents, that define a criteria based on which agents would be added to the Precision Queue. The attributes can be based on an Agent's capability or proficiency level and a true or false value to categorize the agent.

Packaged CCE does *not* support Enterprise Skill Groups for Cisco Unified CM peripheral based skill groups. The support for Avaya PG based skill groups, however, is available in PCCE 4000 and 12000 Agent deployments. After migration, you can opt for Attributes/Precision Queues along with associated scripting changes that use Precision Queue nodes.

For example, you have sales department agents distributed across Boston, New York, Denver, and Los Angeles and if all of these agents are part of an Enterprise Skill Group called Sales_Enterprise (comprising of the Skill Groups Sales_Boston, Sales_New_York, Sales_Denver, and Sales_Los_Angeles). Create a single Precision Queue with the criteria that target all agents having sales attribute for different proficiencies such as languages spoken. This Precision Queue would automatically include all the “sales” agents throughout the enterprise.

For more details on Enterprise Skill Groups and Precision Queues, see the *Configuration Guide for Cisco Unified ICM/Contact Center Enterprise* at https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cust_contact/contact_center/icm_enterprise/icm_enterprise_12_0_1/Configuration/Guide/ucce_b_configuration-guide-for-unified-cce1201/ucce_b_configuration-guide-for-unified-cce1201_chapter_01000.html

Agent Desktop Readiness

Cisco Finesse Reason Code Consolidation and Sync with Unified CCE

Packaged CCE allows you to administer reason codes in Unified CCE Administration rather than administer the reason codes on multiple Cisco Finesse Agent Desktops and CUIC reports. Also, after migrating to Packaged CCE, you will not be dealing with duplicate reason codes (configured through the Reason Code list tool in Configuration Manager) in Unified CCE and the Cisco Finesse servers.

When you add the Cisco Finesse servers to the Packaged CCE inventory, the Cisco Finesse Administration (cfAdmin) does not allow you to create, update, or delete of reason codes. You can, however, view the reason

code in cfAdmin. Updates to existing reason codes or new reason codes created via Unified CCE Administration are automatically orchestrated or synched with all the Cisco Finesse servers to avoid duplication and manual errors.

Reason Codes configured through the Unified CCE Administration tool are broadcast to all Cisco Finesse clusters in the enterprise (unlike Unified CCE, which maintains reason codes per Cisco Finesse cluster).

Reporting Readiness

User Synchronization between Unified CCE and Unified Intelligence Center

After migration, the option to synchronize users from Unified Intelligence Center's administration console is removed. Also, you cannot set up the synchronize option to run on a schedule and rely on a polling mechanism to synchronize users and teams between Unified CCE and Unified Intelligence Center. But the synchronize option is not required because Packaged CCE automatically synchronizes users and teams between Unified CCE and Unified Intelligence Center using a push mechanism.

Before migration, synchronize the users and agents (or agent teams) using the CCE User integration mechanism in the CUIC Administration Console. You can access the CUIC Administration Console using the following URL:

`https://<HOST ADDRESS>/oamp`

For more details, see the "Configure Unified CCE User Integration" topic in the *Administration Console User Guide for Cisco Unified Intelligence Center* at https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cust_contact/contact_center/intelligence_suite/intelligence_suite_1201/maintain_and_operate/guide/cuic_b_admin-console-user-guide-1201.pdf

Outbound Readiness

Managing Zones in Outbound Option Campaigns

Unified CCE supports two time periods, called Zone 1 and Zone 2, to call the customers for each campaign. Each zone lists which of the ten phone numbers to call during that time. Packaged CCE only supports one zone, Zone1.

Self Service Readiness

Ensure the CVP Servers are in the Same Domain

Packaged CCE requires all CVP servers to be part of the same domain as the CCE Administration and Data Server (from which the CVP Servers are administered through the Unified CCE Administration Console).

Ensure that any CVP server that is part of a work group is added to the same domain before starting the migration.

Ensure All CVP Servers in a Site have the Same Configurations

Packaged CCE administers CVP-related configurations at the site level irrespective of the number of peripheral sets you may have in that site. Due to this reason, all the CVP servers in a site are required to have the same configuration.

You may use the Migration tool to segregate CVPs with same configuration in different logical sites during migration.

Or use the CVP Operations Console to ensure all CVPs in a site have the same configuration. To do this, choose one CVP server in a site which can be used as a reference to configure the rest of the CVPs on the site.

If a CVP Server must have a different configuration, consider adding that CVP to a different logical site.

Route Patterns and SIP Server Groups

Unlike CVP OAMP that supports routing to individual devices using an IP address or hostname, the Unified CCE Administration console only supports SIP Server Groups that are targeted using Route Patterns. In Packaged CCE, you add machines as SIP Server groups elements to the Packaged CCE inventory and then associate the machines to the SIP Server groups.



Note If you need routing to multiple sites, after migration, add these endpoints to the Packaged CCE inventory, and then set up routing to the sites.

In Packaged CCE, you also associate the SIP Server Groups and Route Patterns with "Types" such as Agent, VRU, and External. These types determine which devices can be targeted using a Route Pattern.

For more details, see the online help in the Unified CCE Administration console or the *Cisco Packaged Contact Center Enterprise Administration and Configuration Guide* at <https://www.cisco.com/c/en/us/support/customer-collaboration/packaged-contact-center-enterprise/products-maintenance-guides-list.html>

Ensure Same Configuration across Cisco VVBs in a Site

Packaged CCE maintains all Cisco VVB configurations at a site level. Review the existing Cisco VVB configuration to determine whether the Cisco VVBs have to part of the same site, or make necessary amends to ensure all Cisco VVBs have the same configuration at a site level. Use the Cisco VVB Administration tool to make these amends.

You may use the Migration tool to segregate VVBs with same configuration in different logical sites during migration.

Or use the CVP Operations Console to ensure all VVBs in a site have the same configuration before migration. For more details, see the *Cisco Packaged Contact Center Enterprise Install and Upgrade Guides* at <https://www.cisco.com/c/en/us/support/customer-collaboration/packaged-contact-center-enterprise/products-installation-guides-list.html>

ECE Readiness

Compare ECE Departments with AW Departments

After migration, Packaged CCE enables you to manage the departments using the Unified CCE Administration console. However, management via Unified CCE Administration is possible only if every department in the AW database is matched by an ECE department of the same name. If there are multiple ECE clusters in a single deployment, ensure every ECE instance has the same departments as the AW database.

The Migration tool performs this readiness check and notifies you of readiness gaps, if any. The tool also presents step by step procedures on how to fix the gaps.

Compare Agent to Department Mapping

If you use departments in your Unified CCE system, check if the agent to department mapping is consistent between ECE and the AW database.

The Migration tool performs this readiness check and notifies you of readiness gaps, if any. The tool also presents step by step procedures on how to fix the gaps.

Check ECE Context Root Name

The context root name must be system. If context root is not configured as system, ECE must be reinstalled before migrating.

