

## Notes\_on\_Version\_8.5(2+)\_through\_9.0(x)\_VM\_Configurations

The following VM configurations match the following templates:

- UCCE\_9.0\_Win2008\_vmv8\_v1.1.ova
- UCCE\_9.0\_Win2008\_vmv8\_v1.2.ova

For 8.5(2+), please use the UCCE\_9.0\_Win2008\_vmv8\_v1.1.ova, as the UCCE\_8.5\_Win2008\_vmv8\_v1.1.ova has deprecated VM configurations for Agent PGs and Historical Data Servers.

Use the v1.2 OVA only for 9.0(x). The v1.2 ova is identical to v1.1 except for the change of all vNICs to VMXNet3.

Note: Some of the operational capacities specified for the following deployments identify a minimum version required for that capacity. Operational capacities that do not specify version apply to all.

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## Notes on Router VM Configuration for Version 8.5(2+) through 9.0(x)

Used for Unified CCE, ICME, CCH, and ICMH Router.

Maximum operational capacities:

	Unified CCE		Unified ICME		NAM
Release	8.5(2)+	8.5(3)+	8.5(4)ES+	9.0(3)ES+	9.0(3)ES+
<b>Concurrent Agents</b>	8,000	12,000	12,000	28,800	0
<b>Calls Per Second</b>	69	105	105	115	300

### Notes:

- Support for Unified CCH and ICMH CICM Routers is as shown for Unified CCE and ICME, respectively, for single instance usage. You may not deploy multi-instance CICM virtualized.
- For Unified ICME, 150 PG support requires version 9.0(3)ES or later.
- For Unified ICME and NAM, SIGTRAN NIC requires 9.0(3)ES or later.
- While Release 8.5(x) still supports Windows Server 2003, capacities above 8,000 agents require Windows Server 2008 R2, which is supported with Release 8.5(2) or later.

## Notes on Logger VM Configuration for Version 8.5(2+) through 9.0(x)

Used for Unified CCE, ICME, CCH and ICMH Logger.

Maximum operational capacities:

	Unified CCE		Unified ICME		NAM
Release	8.5(2)+	8.5(3)+	8.5(4)ES+	9.0(3)ES+	9.0(3)ES+
<b>Concurrent Agents</b>	8,000	12,000	12,000	28,800	0
<b>Microsoft SQL Edition</b>	Std	Ent	Std	Ent	Std
<b>SAN Required</b>	No	Yes	No	No	No

### Notes:

- Support for Unified CCH and ICMH CICM Loggers is as shown for Unified CCE and ICME, respectively, for single Instance usage. You may not deploy multi-instance CICM virtualized.
- While Release 8.5(x) still supports Windows Server 2003, capacities above 8,000 agents require Windows Server 2008 R2, which is supported with Release 8.5(2) or later.

### Virtual disk configuration notes:

- vDisk 1 = Operating System + application binaries and logs + SQL binaries + SQL tempdb and log files
- vDisk 2 = application database

You may deploy the two vDisks on the same or separate datastores, and you may customize vDisk 2 to meet specific customer database retention requirements.

## Notes on Rogger VM Configuration for Version 8.5(2+) through 9.0(x)

Used for Unified CCE, ICME, CCH and ICMH Rogger.

Maximum operational capacities:

	Unified CCE	Unified ICME	NAM
<b>Release</b>	8.5(2)+	8.5(2)+	9.0(3)ES+
<b>Concurrent Agents</b>	4,000	4,000	0
<b>Calls Per Second</b>	35	58	150

Support for Unified CCH and ICMH CICM Loggers is as shown for Unified CCE and ICME, respectively, for single Instance usage. You may not deploy multi-instance CICM virtualized.

Virtual disk configuration notes:

- vDisk 1 = Operating System + application binaries and logs + SQL binaries + SQL tempdb and log files
- vDisk 2 = application database

You may deploy the two vDisks on the same or separate datastores, and you may customize vDisk 2 to meet specific customer database retention requirements.

## Notes on Agent PG w/ CTI OS - 2,000 agents VM Configuration for Version 8.5(2+) through 9.0(x)

Used for Unified CCE Agent PG w/ CTI OS or Finesse.

Agent PG types supported:

- CM
- Generic
- System

Desktops supported:

- Finesse, with Unified CCE 8.5(3) and later
- CTI Toolkit (all)

Secondary PGs supported (one of the following):

- Media Routing Peripheral Gateway (MR-PG)
  - ◆ Outbound Option with SIP Dialer
  - ◆ Email Interaction Manager/Web Interaction Manager (EIM/WIM)
  - ◆ SocialMiner

- ◆ Third-party multi-channel
- VRU PG

Maximum operational capacities:

- 2,000 concurrent agents
- 1,000 VRU ports (any type)
- 1,500 SIP Dialer ports (each port = 1.33 agents subtracted from capacity)
- 1 CTI OS Server
- 1 Agent CM PIM
- 1 CTI Route Point CM PIM (Optional?no agents)
- 8 VRU PIMs / 5 VRU PIMs (System?IP IVR Only)

## **Notes on Agent PG w/ CTI OS - 450 agents VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified CCE Agent PG with CTI OS or Finesse.

Agent PG types supported:

- CM
- Generic
- System

Desktops supported:

- Finesse, with Unified CCE 8.5(3) and later
- CTI Toolkit (all)

Secondary PGs supported (one of the following):

- Media Routing Peripheral Gateway (MR-PG)
  - ◆ Outbound Option with SIP Dialer
  - ◆ Email Interaction Manager/Web Interaction Manager (EIM/WIM)
  - ◆ SocialMiner
  - ◆ Third-party multi-channel
- VRU PG

Maximum operational capacities:

- 450 concurrent agents
- 225 VRU ports (any type)
- 1 CTI OS Server
- 1 Agent CM PIM
- 2 VRU PIMs / 0 VRU PIMs (System)

## Notes on Agent PG w/ CAD - 1,000 agents VM Configuration for Version 8.5(2+) through 9.0(x)

Used for Unified CCE Agent PG with CAD Service.

Agent PG types supported:

- CM
- Generic
- System

Desktops supported:

- Cisco Agent Desktop (CAD)
- CTI Toolkit (all) (Optional?CTI OS Server installed)

Secondary PGs supported (one of the following):

- Media Routing Peripheral Gateway (MR-PG)
  - ◆ Outbound Option with SIP Dialer
  - ◆ Email Interaction Manager/Web Interaction Manager (EIM/WIM)
  - ◆ SocialMiner
  - ◆ Third-party multi-channel
- VRU PG

Maximum operational capacities:

- 1,000 concurrent agents
- 1,000 VRU ports (any type)
- 750 SIP Dialer ports (each port = 1.33 agents subtracted from capacity)
- 1 CAD Server
- 1 CTI OS Server (optional)
- 1 Agent CM PIM
- 1 CTI Route Point CM PIM (Optional?no agents)
- 8 VRU PIMs / 5 VRU PIMs (System?IP IVR Only)

Note that if SQL Server is installed for CAD logging, you may modify the VM to add:

- 2 vCPU (4 vCPU total)
- 2 GB RAM (8 GB total)
- A second vDisk that you size as needed or a default of 80 GB for the SQL DB

## **Notes on Agent PG w/ CAD - 297 agents VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified CCE Agent PG with CAD Services.

Agent PG types supported:

- CM
- Generic
- System

Desktops supported:

- Cisco Agent Desktop (CAD)
- CTI Toolkit (all) (Optional?CTI OS Server installed)

Secondary PGs supported (one of the following):

- Media Routing Peripheral Gateway (MR-PG)
  - ◆ Email Interaction Manager/Web Interaction Manager (EIM/WIM)
  - ◆ SocialMiner
  - ◆ Third-party multi-channel
- VRU PG

Maximum operational capacities:

- 297 concurrent agents
- 150 VRU ports (any type)
- 1 CAD Server
- 1 CTI OS Server (optional)
- 1 Agent CM PIM
- 2 VRU PIMs / 0 VRU PIMs (System)

Note that if SQL Server is installed for CAD logging, you may modify the VM to add:

- 1 vCPU (2 vCPU total)
- 2 GB RAM (6 GB total)
- A second vDisk that you size as needed or a default of 80 GB for the SQL DB

## **Notes on MR PG - 2,000 agents - 10 PIMs VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified CCE MR PG.

MR PIM types supported:

- Outbound Option with SIP Dialer
- Email Interaction Manager/Web Interaction Manager (EIM/WIM)
- SocialMiner
- Third-party multi-channel

Maximum operational capacities:

- 2,000 concurrent multi-channel agents
- 1,500 SIP Dialer ports (each port = 1.33 agents subtracted from capacity of associated Peripheral's Agent PG)
- 10 PIMs

## **Notes on MR PG - 1,000 agents - 5 PIMs VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified CCE MR PG.

MR PIM types supported:

- Outbound Option with SIP Dialer
- Email Interaction Manager/Web Interaction Manager (EIM/WIM)
- SocialMiner
- Third-party multi-channel

Maximum operational capacities:

- 1,000 concurrent multi-channel agents
- 750 SIP Dialer ports (each port = 1.33 agents subtracted from capacity of associated Peripheral's Agent PG)
- 5 PIMs

## **Notes on VRU PG - 9,600 ports - 10 PIMs VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified CCE, ICME, CCH and ICMH VRU PG.

VRU PIM types supported:

- CVP
- IP IVR
- 3rd Party (GED-125)

Maximum operational capacities:

- 9,600 ports
- 40 calls per second
- 10 PIMs

## **Notes on VRU PG - 1,200 ports - 4 PIMs VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified CCE, ICME, CCH and ICMH VRU PG.

VRU PIM types supported:

- CVP
- IP IVR
- 3rd Party (GED-125)

Maximum operational capacities:

- 1,200 ports
- 10 calls per second
- 4 PIMs

## **Notes on Avaya (Definity) ACD PG VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified ICME and ICMH Avaya (Definity) ACD PG.

For additional requirements, please refer to the [Cisco Unified ICM ACD Supplements for Avaya and the Supported Switches \(ACDs\) matrix](#).

Desktop supported: CTI Toolkit (all) (Optional?CTI OS Server installed)

Maximum operational capacities:

- 2,000 concurrent agents without CTI OS Server
- 1 CTI OS Server (Optional)
  - ◆ 3,000 agents with 5 Skill Groups per agent
  - ◆ 2,500 agents with 10 Skill Groups per agent
  - ◆ 2,000 agents with 15 Skill Groups per agent
  - ◆ 1,500 agents with 20 Skill Groups per agent

## **Notes on TDM ACD PG - 2,000 agents VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified ICME and ICMH TDM ACD PG.

For additional requirements and information about TDM ACD types supported by applicable Unified CCE release, please refer to the [Cisco Unified ICM Supported Switches \(ACDs\) matrix](#).



Desktop supported: CTI Toolkit (all) (Optional?CTI OS Server installed)

Secondary PGs supported (one of the following):

- Media Routing Peripheral Gateway (MR-PG)
- VRU PG

Maximum operational capacities:

- 2,000 concurrent agents
  - ◆ Use of MR PG limits TDM ACD PG to 200 concurrent agents
- 1,000 VRU ports
- 1 CTI OS Server (Optional)
- 1 TDM ACD PIM with CTI OS Server installed
- 5 TDM ACD PIMs without CTI OS Server installed
- 8 VRU PIMs

## **Notes on TDM ACD PG - 250 agents VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified ICME and ICMH TDM ACD PG.

For additional requirements and information about TDM ACD types supported by applicable Unified CCE release, please refer to the [Cisco Unified ICM Supported Switches \(ACDs\) matrix](#).

Desktop supported: CTI Toolkit (all) (Optional?CTI OS Server installed)

Secondary PG supported: VRU PG

Maximum operational capacities:

- 250 concurrent agents
- 125 VRU ports
- 1 CTI OS Server (Optional)
- 1 TDM ACD PIM with CTI OS Server installed
- 5 TDM ACD PIMs without CTI OS Server installed
- 2 VRU PIMs

## **Notes on UCC Gateway PG - 2,000 agents VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for UCC Gateway PG, Parent ICME to Child UCCE integrations.

Maximum operational capacities:

- 2,000 concurrent agents
- 5 UCC Gateway PIMs

You may connect the UCC Gateway PG to Unified CCE or Unified CCX systems (not both).

## **Notes on UCC Gateway PG - 450 agents VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for UCC Gateway PG, Parent ICME to Child UCCE integrations.

Maximum operational capacities:

- 450 concurrent agents
- 5 UCC Gateway PIMs

You may connect the UCC Gateway PG to Unified CCE or Unified CCX systems (not both).

## **Notes on Administration Client VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified CCE Administration Clients.

May also be used for ISE.

## **Notes on Administration Server - AW VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified CCE Administration Workstation (AW.)

Maximum operational capacities:

- 50 concurrent Real-Time monitoring sessions
  - ◆ Administration Client
  - ◆ ISE
  - ◆ CUIC
  - ◆ Third Party

## **Notes on AW-HDS VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified CCE Administration Workstation - Historical Data Server.

Maximum operational capacities:

- 200 reporting users, each running:
  - ◆ 2 real-time reports / max 50 rows each

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- ◆ 1 historical report per hour returning not more than 800 rows or with a data set not larger than 3000

**Note:** Unified CCE deployments for up to 12,000 agents require SAN storage and Microsoft SQL Enterprise Edition.

### **Notes on AW-HDS-DDS VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified CCE Administration Workstation - Historical Data Server - Detailed Data Server.

Maximum operational capacities:

- 200 Reporting Users, each running:
  - ◆ 2 real-time reports / max 50 rows each
  - ◆ 1 historical report per hour returning not more than 800 rows or with a data set not larger than 3000

**Note:** Unified CCE deployments for up to 12,000 agents require SAN storage and Microsoft SQL Enterprise Edition.

### **Notes on HDS-DDS VM Configuration for Version 8.5(2+) through 9.0(x)**

Used for Unified CCE Historical Data Server - Detailed Data Server.

Maximum operational capacities: 200 Reporting Users, each running 2 historical reports per hour either returning not more than 800 rows or with a data set not larger than 3000

**Note:** Unified CCE deployments for up to 12,000 agents require SAN storage and Microsoft SQL Enterprise Edition.

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