



# Cisco Prime Access Registrar 7.2.1 Release Notes

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Cisco Prime Access Registrar (Prime Access Registrar) is a high performance, carrier class, 3GPP-compliant, 64-bit RADIUS/Diameter solution that provides scalable, flexible, intelligent authentication, authorization, and accounting (AAA) services.

Prime Access Registrar comprises a RADIUS/Diameter server designed from the ground up for performance, scalability, and extensibility for deployment in complex service provider environments including integration with external data stores and systems. Session and resource management tools track user sessions and allocate dynamic resources to support new subscriber service introductions.



## Note

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Prime Access Registrar can be used with Red Hat Enterprise Linux (RHEL) 6.4/6.6/7.0/7.2 and CentOS 6.5 64-bit operating systems using kernel and Glibc.

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## System Requirements

This section describes the system requirements to install and use the Prime Access Registrar software.

[Table 1](#) lists the system requirements for Prime Access Registrar 7.2.1.



**Table 1** Minimum Hardware and Software Requirements for Prime Access Registrar Server

OS version	RHEL 6.4/6.6/7.0/7.2 CentOS 6.5
Model	X86
CPU type	Intel Xeon CPU 2.30 GHz
CPU Number	4
CPU speed	2.30 GHz
Memory (RAM)	8 GB
Swap space	10 GB
Disk space	1*146 GB

## Co-Existence With Other Network Management Applications

To achieve optimal performance, Prime Access Registrar should be the only application running on a given server. In certain cases, when you choose to run collaborative applications such as a SNMP agent, you must configure Prime Access Registrar to avoid UDP port conflicts. The most common conflicts occur when other applications also use ports 2785 and 2786. For more information on SNMP configuration, see the Configuring SNMP section, in the [Cisco Prime Access Registrar 7.2 Installation and Configuration Guide](#).

## Enhanced Features in Cisco Prime Access Registrar 7.2.1

Prime Access Registrar 7.2.1 provides the following features:

- [Extension of Platform Virtualization Support Using KVM, page 2](#)
- [Support for HSS Interconnectivity, page 2](#)
- [Support for No-State-Maintained in Abort Session Request \(ASR\), page 5](#)

### Extension of Platform Virtualization Support Using KVM

Prime Access Registrar works successfully in a Kernel-based Virtual Machine (KVM) environment, a virtualization infrastructure for the Linux kernel that turns it into a hypervisor.

You can enable KVM-supported packages during OS installation.

### Support for HSS Interconnectivity

Prime Access Registrar provides a feature to interconnect multiple Home Subscriber Server (HSS) clusters over Stream Control Transmission Protocol (SCTP). This feature enables Prime Access Registrar to connect with multiple HSS with the same host name. The HSS clusters can share the same Diameter host name but different SCTP ports.

To enable this feature, a new parameter **DestinationHost** is introduced under the Diameter SCTP remote server configuration. The DestinationHost parameter value, if configured, will be used as the Destination-Host while communicating with that server. Two or more remote servers can share the same value configured against this parameter. If DestinationHost parameter is not configured, the HostName parameter value will be used as the Destination-Host.

Following is a sample configuration for this feature:

```
[ Services/DiameterProxy]
  Name = DiameterProxy
  Description =
  Type = diameter
  IncomingScript~ =
  OutgoingScript~ =
  EnableSticky = FALSE
  MultiplePeersPolicy = Failover
  PeerTimeOutPolicy = FailOver
  DiaRemoteServers/
    Entries 1 to 2 from 2 total entries
    Current filter: <all>

    HSSCluster1/
      Name = HSSCluster1
      Metric = 3
      Weight = 0
      IsActive = TRUE
    HSSCluster2/
      Name = HSSCluster1
      Metric = 5
      Weight = 0
      IsActive = TRUE
```

HSS cluster configurations are given below:

#### **HSScluster1**

```
[ RemoteServers/HSScluster1 ]
  Name = HSScluster1
  Description =
  Protocol = diameter
  HostName = <HSS-VIP1>
  DestinationPort = 3869
  DestinationRealm = cisco.com
  ReactivateTimerInterval = 3000
  Vendor =
  IncomingScript~ =
  OutgoingScript~ =
  MaxTries = 3
  MaxTPSLimit = 0
  MaxSessionLimit = 0
  InitialTimeout = 2000
  LimitOutstandingRequests = FALSE
  MaxPendingPackets = 0
  MaxOutstandingRequests = 0
  DWatchDogTimeout = 2500
  SCTP-Enabled = TRUE
  DestinationHost = hss1.cisco.com
  TLS-Enabled = FALSE
  AdvertiseHostName =
  AdvertiseRealm =
  SCTPParameters/
    SourcePort = 3866
    RTOInitial = 200
    RTOMin = 10
```

```

RTOMax = 500
MaxInitRetransmits = 4
AssociationMaxRetrans = 8
PathMaxRetrans = 4
RTOCookieLife = 60000
HBInterval = 30000
SACKTimeout = 40
InitNumOstreams = 17
InitMaxInstreams = 17
SCTPAdvertisedHostName/
  Local/
    1. <CPAR-IPA>
    2. <CPAR-IPB>
  Remote/
    1. <HSS-VIP1>
    2. <HSS-VIP2>

```

**HSSCluster2**

```

[ RemoteServers/HSSCluster2 ]
  Name = HSSCluster2
  Description =
  Protocol = diameter
  HostName = <HSS-VIP3>
  DestinationPort = 4000
  DestinationRealm = cisco.com
  ReactivateTimerInterval = 3000
  Vendor =
  IncomingScript~ =
  OutgoingScript~ =
  MaxTries = 3
  MaxTPSLimit = 0
  MaxSessionLimit = 0
  InitialTimeout = 2000
  LimitOutstandingRequests = FALSE
  MaxPendingPackets = 0
  MaxOutstandingRequests = 0
  DWatchDogTimeout = 2500
  SCTP-Enabled = TRUE
  DestinationHost = hss1.cisco.com
  TLS-Enabled = FALSE
  AdvertiseHostName =
  AdvertiseRealm =
  SCTPParameters/
    SourcePort = 5001
    RTOInitial = 200
    RTOMin = 10
    RTOMax = 500
    MaxInitRetransmits = 4
    AssociationMaxRetrans = 8
    PathMaxRetrans = 4
    RTOCookieLife = 60000
    HBInterval = 30000
    SACKTimeout = 40
    InitNumOstreams = 17
    InitMaxInstreams = 17
  SCTPAdvertisedHostName/
    Local/
      1. <CPAR-IPA>
      2. <CPAR-IPB>
    Remote/
      1. <HSS-VIP3>
      2. <HSS-VIP4>

```

## Support for No-State-Maintained in Abort Session Request (ASR)

To enable this feature, a new parameter **AuthSessionStateInASR** is introduced under the Diameter client configuration.

In 3GPP reverse flow, when the remote server sends a Registration Termination Request (RTR), Prime Access Registrar performs a search using the session-ID to identify the client. Based on the **AuthSessionStateInASR** value of the client, Prime Access Registrar decides whether to delete the session instantly or to wait for a Session Termination Request (STR) response from the client before deleting the session as described in [Table 2](#).

**Table 2** *AuthSessionStateInASR Parameter Values*

AuthSessionStateInASR Value	Action
State-Maintained	Prime Access Registrar waits for an STR response from the client before deleting the session.
No-State-Maintained	Prime Access Registrar deletes the session and sends an Abort Session Request (ASR) to the client without waiting for an STR response from the client.

## Cisco Prime Access Registrar 7.2.1 Bugs

For more information on a specific bug or to search all bugs in a particular Prime Access Registrar release, see [Using the Bug Search Tool](#).

### Using the Bug Search Tool

Use the Bug Search tool (BST) to get the latest information about Cisco Prime Access Registrar bugs. BST allows partners and customers to search for software bugs based on product, release, and keyword, and it aggregates key data such as bug details, product, and version.

BST allows you to:

- Quickly scan bug content
- Configure e-mail notifications for updates on selected bugs
- Start or join community discussions about bugs
- Save your search criteria so you can use it later

When you open the Bug Search page, check the interactive tour to familiarize yourself with these and other Bug Search features.

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- Step 1** Log into the Bug Search Tool.
- Go to <https://tools.cisco.com/bugsearch>.
  - At the Log In screen, enter your registered Cisco.com username and password; then, click **Log In**. The Bug Search page opens.

**Note**

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If you do not have a Cisco.com username and password, you can register for them at <http://tools.cisco.com/RPF/register/register.do>.

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**Step 2** To search for a specific bug, enter the bug ID in the Search For field and press **Return**.

**Step 3** To search for bugs in a particular release:

- a. In the Search For field, enter the product name and the release version, e.g. Cisco Prime Access Registrar 7.2.1, and press **Return**. (Leave the other fields empty.)
  - b. When the search results are displayed, use the filter and sort tools to find the types of bugs you are looking for. You can search for bugs by severity, by status, how recently they were modified, according to the number of support cases associated with them, and so forth.
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## Related Documentation

The following documentation is available for Prime Access Registrar 7.2.1:

- [Cisco Prime Access Registrar 7.2 User Guide](#)
- Cisco Prime Access Registrar 7.2.1 Release Notes (this guide)

For a complete list of Cisco Prime Access Registrar 7.2 documentation, see the [Cisco Prime Access Registrar 7.2 Documentation Overview](#).

**Note**

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We sometimes update the documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates.

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## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see [What's New in Cisco Product Documentation](#).

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the [What's New in Cisco Product Documentation RSS feed](#). The RSS feeds are a free service.

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