

Cisco Gateway GPRS Support Node Release 7 Ordering Guide

The Cisco® Gateway GPRS Support Node (GGSN) is a high-performance data gateway connecting General Packet Radio Service (GPRS) and Universal Mobile Telecommunications Service (UMTS) mobile operators' Public Land Mobile Networks (PLMNs) to external data networks (Internet, corporate intranet, or multimedia services, for example). The Cisco GGSN supports GPRS 2G/2.5G and UMTS third-generation (3G)-connected mobile networks. The Cisco GGSN supports the relevant standards while providing enhanced quality of service (QoS), service-aware billing, and high availability. Cisco GGSN software runs on industry-leading Cisco Systems® routing platforms and is based on Cisco IOS® Software technology. For more information, please visit <http://www.cisco.com/go/ggsn>.

The Cisco Gateway GPRS Support Node comprises:

- Software Right-To-Use (RTU) License – This is a legal document that entitles the end user to run Cisco GGSN software as stipulated. There are two types of licenses that correspond to the feature sets used (BASIC or PREMIUM). Feature breakdown can be found at here. Additionally, these licenses are broken down into 60K and 300K connection licenses (see Table 1).
- Feature Right-To-Use (RTU) License – This is a legal document that entitles the end user to run Cisco GGSN software with the specified feature.
- Multiprocessor WAN Application Module – This is a physical line card in a Cisco 7600 router that runs the Cisco GGSN software.
- Software Application Support (SAS) – This provides software support and software upgrades for the Cisco GGSN. One SAS contract is needed per SKU purchased.

Ordering Information

The ordering information below (Table 1) contains the information needed to order Cisco GGSN software/hardware. GGSN software licenses are broken down into two (2) categories, Basic and Premium. A complete list of the feature breakdown can be found at http://www.cisco.com/en/US/prod/collateral/wireless/wirelssw/ps873/prod_bulletin0900aecd804cf787.html.

Table 1. Ordering Information

Type	Product Code	Product Description	How many do I buy?
Software License RTU	SC-SVC-GG70B	Cisco GGSN Release 7 BASIC Software License - 300K Connections	This license entitles the end user to terminate up to 300K connections on an MWAM line card (WS-MWAM-BUN-1GB=) using BASIC features.
	SC-SVC-GG70BIM	Cisco GGSN Release 7 BASIC Software License - 60K Connections	This license entitles the end user to terminate up to 60K connections on an MWAM line card (WS-MWAM-BUN-1GB=) using BASIC features.

	SC-SVC-GG70P	Cisco GGSN Release 7 PREMIUM Software License - 300K Connections	This license entitles the end user to terminate up to 300K connections on an MWAM line card (WS-MWAM-BUN-1GB=) using PREMIUM features.
	SC-SVC-GG70PIM	Cisco GGSN Release 7 PREMIUM Software License - 60K Connections	This license entitles the end user to terminate up to 60K connections on an MWAM line card (WS-MWAM-BUN-1GB=) using PREMIUM features.
Feature License RTU	FL-IPV6-GG70P	Cisco GGSN Release 7 IPv6 Feature License – 300K Connections	One license per 300K connections when IPv6 is used. This license requires the use of the PREMIUM software license (SC-SVC-GG70P).
	FL-IPV6-GG70PIM	Cisco GGSN Release 7 IPv6 Feature License – 60K Subscribers	One license per 60K connections when IPv6 is used. This license requires the use of the PREMIUM software license (SC-SVC-GG70PIM).
	FL-IPV6-GG70PB	Cisco GGSN Release 7 IPv6 Feature License – Bundle	One license per GGSN bundle (WS-SVC-GG70PB) when IPv6 is used. This license requires the use of the PREMIUM GGSN Bundle license (WS-SVC-GG70PB).
	FR-EXCHDR=	Mobile Wireless Exchange Director Load Balancer	This license entitles the end user to load balance subscriber sessions across multiple GGSN line cards and/or processors in a single Cisco 7600 Router chassis. This license is required in most cases where more than one line card or processor is used.
Upgrade License RTU	SC-SVC-GG70P-U=	Cisco GGSN Release 7 PREMIUM Upgrade from Release 6 PREMIUM – 300K Connections	This license entitles the end user to upgrade from “GGSN 6.0 PREMIUM – MWAM” to a “GGSN 7.0 PREMIUM – 300K Connections” license.
	SC-SVC-GG70PIM-U=	Cisco GGSN Release 7 PREMIUM Upgrade from Release 6 PREMIUM – 60K Connections	This license entitles the end user to upgrade from “GGSN 6.0 PREMIUM – Single Image” to a “GGSN 7.0 PREMIUM – 60K Connections” license.
	SC-SVC-GG70B-U=	Cisco GGSN Release 7 BASIC Upgrade from Release 6 BASIC – 300K Connections	This license entitles the end user to upgrade from “GGSN 6.0 BASIC – MWAM” to a “GGSN 7.0 BASIC – 300K Connections” license.
	SC-SVC-GG70BIM-U=	Cisco GGSN Release 7 BASIC Upgrade from Release 6 BASIC – 60K Connections	This license entitles the end user to upgrade from “GGSN 6.0 BASIC – Single Image” to a “GGSN 7.0 BASIC – 60K Connections” license.
	SC-SVC-GG70B2P=	Cisco GGSN Release 7 BASIC to PREMIUM Upgrade – 300K Connections	This license entitles the end user to upgrade from “GGSN 7.0 BASIC – 300K Connections” to a “GGSN 7.0 PREMIUM – 300K Connections” license.
	SC-SVC-GG70B2PIM=	Cisco GGSN Release 7 BASIC to PREMIUM Upgrade – 60K Connections	This license entitles the end user to upgrade from “GGSN 7.0 BASIC – 60K Connections” to a “GGSN 7.0 PREMIUM – 60K Connections” license.
	SC-SVC-GG70PB4-U=	Cisco GGSN Release 7 BASIC to PREMIUM Upgrade – 300K Connections	This license entitles the end user to upgrade from GGSN 6.0 Premium Bundle to GGSN 7.0 Premium Bundle with IPv4 Support.
	SC-SVC-GG70PB6-U=	Cisco GGSN Release 7 BASIC to PREMIUM Upgrade – 300K Connections	This license entitles the end user to upgrade from GGSN 6.0 Premium Bundle to GGSN 7.0 Premium Bundle with IPv4 and IPv6 Support.
Bundle License	WS-SVC-GG70PB	Cisco GGSN Release 7 PREMIUM Bundle – 300K Connections + HW + SW	This bundle includes two (2) MWAM line cards (WS-MWAM-BUN-1GB=) and two (2) GGSN Release 7 PREMIUM licenses for up to 300K connections when used for Session Redundancy.
MWAM Line Card	WS-MWAM-BUN-1GB=	Cisco MWAM 1GB Line Card	Cisco 7600 Router line card that runs Cisco GGSN software. Each line card supports up to 300K connections.

PSD Line Card	WS-SVC-PSD-1	Cisco Persistent Storage Device (PSD)	Cisco 7600 Router line card that provides local storage backup for CDRs in the case where the Charging Gateways (CG) are unreachable. One PSD can support up to 900K connections (e.g. 3 GGSN line cards with maximum connections)
SAS	The SAS contract can be ordered directly using the online Cisco Ordering Tool. To order this configuration, go to: http://www.cisco.com/en/US/ordering/index.shtml and log in using a Cisco.com password and select "Ordering Tool."		

Pricing Tool

All part descriptions and part numbers for all Cisco products can be accessed using the online Cisco Pricing Tool (Cisco.com login is required) at: <https://tools.cisco.com/qtc/pricing/MainServlet>

This provides an up-to-date list of all products and their part numbers. Search from any of the following to locate the Cisco Signaling Gateway Manager software and RTU licenses:

- Product Price Search / Product Family / Mobile Wireless Data Products / GGSN (for GSM Markets)
- Product Price Search / Product Number / GGSN

The Cisco Pricing Tool requires a Cisco.com user name and password. If you are not already registered for Cisco.com, go to: <http://tools.cisco.com/RPF/register/register.do> and follow the instructions. After you have registered, you may access the Pricing Tool.

Examples

Below are examples of various GGSN configurations that can be added to the Cisco 7600 Router when ordering.

Table 2. 900K IPv4/IPv6 Connections, PSD, and Session Redundancy with PREMIUM Feature Set

Product ID	Qty	Product Description	Notes
WS-SVC-GG70PB	3	Cisco GGSN Release 7 PREMIUM Bundle – 300K Connections + HW + SW	This example configuration supports up to 900K connections using IPv4 and IPv6 PDPs (SC-SVC-GG70PB + FL-IPV6-GG70PB), PREMIUM feature set, and Session Redundancy. Additionally, the connections to this chassis can be load balanced across all the MWAM line cards using the Exchange Director (FR-EXCHDR). Call Detail Records (CDR) will be sent to the PSD for backup in the case where the Charging Gateways (CG) fail.
FL-IPV6-GG70PB	3	Cisco GGSN Release 7 IPv6 Feature License – Bundle	
WS-SVC-PSD-1	1	Cisco Persistent Storage Device (PSD)	
FR-EXCHDR	1	Mobile Wireless Exchange Director Load Balancer	

Table 3. 300K IPv4/IPv6 Connections and Session Redundancy with PREMIUM Feature Set

Product ID	Qty	Product Description	Notes
WS-SVC-GG70PB	1	Cisco GGSN Release 7 PREMIUM Bundle – 300K Connections + HW + SW	This example configuration supports up to 300K connections using IPv4 and IPv6 PDPs (SC-SVC-GG70PB + FL-IPV6-GG70PB), PREMIUM feature set, and Session Redundancy. Additionally, the connections to this chassis can be load balanced across all processors on the MWAM line card using the Exchange Director (FR-EXCHDR).
FL-IPV6-GG70PB	1	Cisco GGSN Release 7 IPv6 Feature License – Bundle	
FR-EXCHDR	1	Mobile Wireless Exchange Director Load Balancer	

Table 4. 300K IPv4 Connections with PREMIUM Feature Set

Product ID	Qty	Product Description	Notes
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SC-SVC-GG70PIM	2	Cisco GGSN Release 7 PREMIUM Software License - 60K Connections	This example configuration supports up to 120K connections using IPv4 PDPs (2 x SC-SVC-GG70PIM) using the PREMIUM feature set. Additionally, the connections to this chassis can be load balanced across all processors on the MWAM line card (WS-SVC-MWAM-1) using the Exchange Director (FR-EXCHDR).
FR-EXCHDR	1	Mobile Wireless Exchange Director Load Balancer	
WS-SVC-MWAM-1	1	Multi-Processor WAN Application Module - 1GB	

Table 5. 120K IPv4/IPv6 Connections with PREMIUM Feature Set

Product ID	Qty	Product Description	Notes
SC-SVC-GG70PIM	2	Cisco GGSN Release 7 PREMIUM Software License - 60K Connections	This example configuration supports up to 120K connections using IPv4 PDPs (2 x SC-SVC-GG70PIM + 2 x FL-IPV6-GG70PIM) using the PREMIUM feature set. Additionally, the connections to this chassis can be load balanced across all processors on the MWAM line card (WS-SVC-MWAM-1) using the Exchange Director (FR-EXCHDR).
FR-EXCHDR	1	Mobile Wireless Exchange Director Load Balancer	
FL-IPV6-GG70PIM	2	Cisco GGSN Release 7 IPv6 Feature License – 60K Subscribers	
WS-SVC-MWAM-1	1	Multi-Processor WAN Application Module - 1GB	

Table 6. 60K IPv4 Connections with BASIC Feature Set

Product ID	Qty	Product Description	Notes
SC-SVC-GG70BIM	1	Cisco GGSN Release 7 BASIC Software License - 60K Connections	This example configuration supports up to 60K connections using IPv4 PDPs (SC-SVC-GG70BIM) using the BASIC feature set.
WS-SVC-MWAM-1	1	Multi-Processor WAN Application Module - 1GB	

Appendix

Cisco Mobility Homepage is located at <http://www.cisco.com/go/mobile>.

Cisco GGSN Homepage is located at <http://www.cisco.com/go/ggsn>.

Cisco GGSN Documentation is located at http://www.cisco.com/en/US/products/sw/wirelssw/ps873/tsd_products_support_series_home.html

Cisco PSD Homepage is located at <http://www.cisco.com/en/US/products/hw/ps5481/ps5515/index.html>.



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