



## ISG SSO and ISSU

The SSO and ISSU feature for Intelligent Services Gateway (ISG) adds high availability (HA) support to ISG features.

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## Prerequisites for ISG SSO and ISSU

SSO and ISSU must be enabled on the ISG router. For configuration information, see the [High Availability Configuration Guide, Cisco IOS XE Release 3S](#).

## Information About ISG SSO and ISSU

### High Availability for ISG Features

The SSO and ISSU feature provides high availability (HA) support for the following ISG features during a stateful switchover (SSO) or In Service Software Upgrade (ISSU) event:

Feature	Description	Configuration Information
Absolute timeout (session timer)	Timer is restarted on the new standby Route Processor (RP). During bulk synchronization to the standby RP, the remaining timeout duration is sent to the standby RP and used while the feature is being installed.	“Configuring ISG Policies for Session Maintenance” module in this guide
Idle timeout (connection timer)	Timer is restarted on the new standby RP.	“Configuring ISG Policies for Session Maintenance” module in this guide
ISG accounting	Cumulative counters and accounting ID are checkpointed to the standby RP.	“Configuring ISG Accounting” module in this guide

Feature	Description	Configuration Information
ISG policer (dynamic rate limiting)	HA support was enabled for this feature.	“Configuring MQC Support for IP Sessions” module in this guide
Keepalive	Associated timers are restarted after the control plane switchover.	“Configuring ISG Policies for Session Maintenance” module in this guide
Layer 4 redirect	Layer 4 redirect includes the selected service group in its checkpoint data during the initial session and bulk synchronization. The standby RP uses the service group instead of selecting a new one.	“Redirecting Subscriber Traffic Using ISG Layer 4 Redirect” module in this guide
Port-bundle host key (PBHK)	PBHK includes the allocated bundle ID in its checkpoint data during the initial session and bulk synchronization. Upon session replay, the standby RP reserves the bundle ID instead of allocating a new one.	“Configuring ISG Port-Bundle Host Key” module in this guide
Traffic classes	ISG traffic classes are checkpointed to the standby RP and established during session replay.	“Configuring ISG Subscriber Services” module in this guide

## Additional References

### Related Documents

Related Topic	Document Title
Cisco IOS commands	<a href="#">Cisco IOS Master Commands List, All Releases</a>
ISG commands	<a href="#">Cisco IOS Intelligent Services Gateway Command Reference</a>
HA commands	<a href="#">Cisco IOS High Availability Command Reference</a>
HA configuration	<a href="#">High Availability Configuration Guide, Cisco IOS XE Release 3S</a>
Configuring ISG accounting	“Configuring ISG Accounting” module in this guide
Configuring ISG timers	“Configuring ISG Policies for Session Maintenance” module in this guide
Configuring Layer 4 redirect	“Redirecting Subscriber Traffic Using ISG Layer 4 Redirect” module in this guide

Related Topic	Document Title
Configuring port-bundle host key	“Configuring ISG Port-Bundle Host Key” module in this guide
Configuring traffic classes	“Configuring ISG Subscriber Services” module in this guide

### Technical Assistance

Description	Link
The Cisco Support and Documentation website provides online resources to download documentation, software, and tools. Use these resources to install and configure the software and to troubleshoot and resolve technical issues with Cisco products and technologies. Access to most tools on the Cisco Support and Documentation website requires a Cisco.com user ID and password.	<a href="http://www.cisco.com/cisco/web/support/index.html">http://www.cisco.com/cisco/web/support/index.html</a>

## Feature Information for ISG SSO and ISSU

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to [www.cisco.com/go/cfn](http://www.cisco.com/go/cfn). An account on Cisco.com is not required.

**Table 1: Feature Information for ISG SSO and ISSU**

Feature Name	Releases	Feature Information
ISG: Flow Control: SSO/ISSU	Cisco IOS XE Release 3.5S	<p>HA support was added for the following ISG features:</p> <ul style="list-style-type: none"> <li>• Absolute Timeout</li> <li>• Idle Timeout</li> <li>• ISG Accounting</li> <li>• ISG Policer</li> <li>• Keepalive</li> <li>• Layer 4 Redirect</li> <li>• Port-Bundle Host Key</li> <li>• Traffic Classes</li> </ul>

