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### Cisco Automated IOS Protection Solution



# **Solution Summary**

- Along with applicable advisory announcements by the Cisco<sup>®</sup> Product Security Incident Response Team (PSIRT), a package of traffic filters will be posted to Cisco.com
- Filters are designed to protect the router itself by detecting and stopping potential exploits of software vulnerabilities announced by Cisco PSIRT
- Packages posted also contain Cisco IOS<sup>®</sup> Software versions to which the filters apply
- Each traffic filter in the packages is encrypted and can be decrypted only by Cisco routers configured for this automated self-protection mechanism
- As an extra security measure, packages contain a checksum also digitally signed by Cisco
- Routers will apply only filters applicable to the Cisco IOS Software version running
- Filters may be applied to traffic passing through selected or all interfaces configured on the router
- Filter packages may be do downloaded manually or in an automated (periodic) fashion from a local server or directly from Cisco.com
- Solution requires a Security license on the Cisco Integrated Services Routers Generation 2 (ISR G2) Family of routers

# Solution Overview (1 of 3)



# Solution Overview (2 of 3)

#### **Cisco PSIRT Filter Packaging**

- With only one-time configuration, a user can deploy Cisco<sup>®</sup> PSIRT self-protection filters on a router
- configured to check periodically for package updates

Router can be configured to pull package updates automatically from Cisco or any server



# Solution Overview (3 of 3)

Cisco PSIRT Filter Package Loading and Application



 Cisco<sup>®</sup> PSIRT self-protection filters are assembled into a package The package is then applied to protect the Cisco IOS<sup>®</sup> Software control plane and (if desired) selected physical interfaces in the inbound and outbound traffic directions

OUT

**Cisco IOS Software** 

**Control Plane** 

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## Possible Use of Cisco PSIRT Filter Package Loading Process



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