

# Cisco IOS Software Release 15.1(2)SY2 for New Hardware and Software Support for Cisco Catalyst 6500/6800 Series

PB731482

Cisco IOS<sup>®</sup> Software Release 15.1(2)SY2 adds hardware and software support for the Cisco<sup>®</sup> Catalyst<sup>®</sup> 6880-X Series Switches while continuing to extend the rich feature set from Release 15.1(2)SY1 on Cisco Catalyst 6500/6800 Series platforms.

Cisco IOS Software Release 15.1(2)SY2 is a rebuild of the extended maintenance Release 15.1(2)SY train for Cisco Catalyst 6500/6800 Series. The release supports Supervisor Engine 2T, Supervisor Engine 720, and Cisco Catalyst 6880-X. Following are the highlights of the new hardware and software supported in Release 15.1(2)SY2.

## New Hardware Support

- Cisco Catalyst 6880-X Multirate Port Card

## New Software Support

- Cisco Catalyst Instant Access parent support on Cisco Catalyst 6880-X
- Cisco Catalyst Virtual Switching System Quad-Supervisor Stateful Switchover (VS4O) with Instant Access
- Downlink port channel on Instant Access host ports
- 1 Gig fabric link support for Instant Access

For detailed information about the features and hardware supported in Release 15.1(2)SY2, refer to the Cisco IOS Software Release 15.1(2)SY2 release notes and customer documentation at:

- [http://www.cisco.com/en/US/docs/switches/lan/catalyst6500/ios/15.1SY/release\\_notes.html](http://www.cisco.com/en/US/docs/switches/lan/catalyst6500/ios/15.1SY/release_notes.html)
- [http://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst6500/ios/15-1SY/config\\_guide/sup2T/15\\_1\\_sy\\_swcg\\_2T.html](http://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst6500/ios/15-1SY/config_guide/sup2T/15_1_sy_swcg_2T.html)

Not all features may be supported on all platforms. Use the Cisco Feature Navigator to find information about platform support and Cisco IOS Software image support: <http://tools.cisco.com/ITDIT/CFN/jsp/index.jsp>.

You must have an account on Cisco.com to access the Cisco Feature Navigator.

## New Hardware Support in Release 15.1(2)SY2

Starting with Cisco IOS Software Release 15.1(2)SY2, Cisco Catalyst 6880-X (Figure 1) supports the 16-port multirate port card, allowing the Cisco Catalyst 6880-X system to scale up to 80 10G/1G ports in a compact form factor. The Cisco Catalyst 6880-X fully inherits the rich feature set as well as unrivalled maturity from the industry-leading campus backbone platform Cisco Catalyst 6500. It offers the optimal combination of 10G density, services, and price for the midsize campus, filling the gap between fixed low-end backbone switches and high-end modular ones.

**Figure 1.** Cisco Catalyst 6880-X Multirate Port Card and Full System



### Primary Highlights

- Cisco Catalyst 6880-X port card has 16 multirate ports that support 1/10G and 10/100Mbps with a wide range of optics, including 10G SFP+, 10G SFP+ twinax copper cables, 1G SFP, GLC-T, and 100FX.
- Cisco Catalyst 6880-X port card offers an LE version (256K IPv4 routes) and XL version (2M IPv4 routes).
- Cisco Catalyst 6880-X is an “extensible” fixed switch with a built-in supervisor and four extensible slots, providing the flexibility to grow as needed.
- Cisco Catalyst 6880-X switch supports up to 80 ports in 10G/1G mode or 20 ports in 40G mode.
- Cisco Catalyst 6880-X inherits the same advanced software features as Cisco Catalyst 6500 and has the optimal combination of 10G density, services, and price for the midsize campus.

For more information about the port card and base system, refer to the Cisco Catalyst 6880-X data sheet at <http://www.cisco.com/c/en/us/products/switches/catalyst-6880-x-switch/index.html>.

Cisco IOS Software Release 15.1(2)SY2 adds support for the modules listed in Table 1.

**Table 1.** Supported Modules

Part Number	Module
<b>C6880-X-LE-16P10G</b>	Cisco Catalyst 6880-X Multirate Port Card (Standard Tables)
<b>C6880-X-16P10G</b>	Cisco Catalyst 6880-X Multirate Port Card (XL Tables)

### Software Feature Highlights of Release 15.1(2)SY2

#### Cisco Catalyst Instant Access Parent Support on Cisco Catalyst 6880-X

Starting with Cisco IOS Software Release 15.1(2)SY2, Cisco Catalyst 6880-X fully supports Cisco Catalyst Instant Access, an industry-leading technology that makes it possible to manage the entire campus network through a single touchpoint with tremendous operational consistency and IT agility. Cisco Catalyst 6880-X with Cisco Catalyst Instant Access provides an end-to-end solution to simplify network operations, configuration, and management for midsize campus networks.

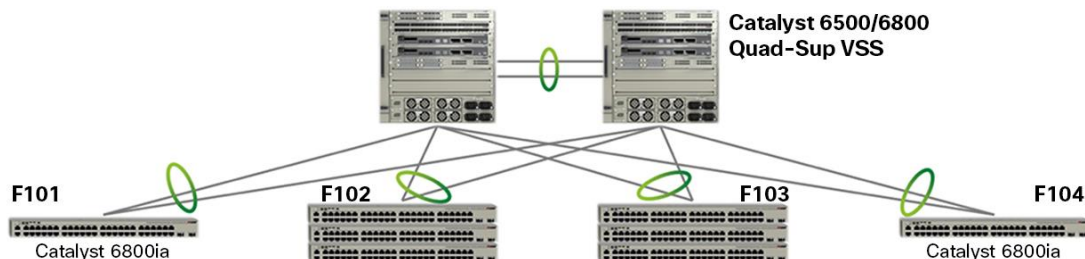
For more information about Cisco Catalyst Instant Access, visit <http://www.cisco.com/c/en/us/solutions/enterprise-networks/catalyst-instant-access-solution/>.

#### Cisco Catalyst Virtual Switching System Quad-Supervisor Stateful Switchover (VS4O) with Instant Access

Cisco Catalyst Instant Access is now supported in the Cisco Catalyst 6500/6800 VSS with Quad-Supervisor Stateful Switchover (VS4O). VSS Quad-Sup SSO is a revolutionary technology that allows four supervisors to run in hot redundancy mode in a single VSS system, achieving 99.999 percent uptime in the network through multilevel failover protection with a single resilient control plane. With Instant Access parents running in the VSS Quad-Sup SSO mode, the entire Instant Access domain can now operate uninterrupted with maximum resiliency.

(See Figure 2)

**Figure 2.** Cisco Catalyst 6500/6800 Quad-Sup VSS with Instant Access

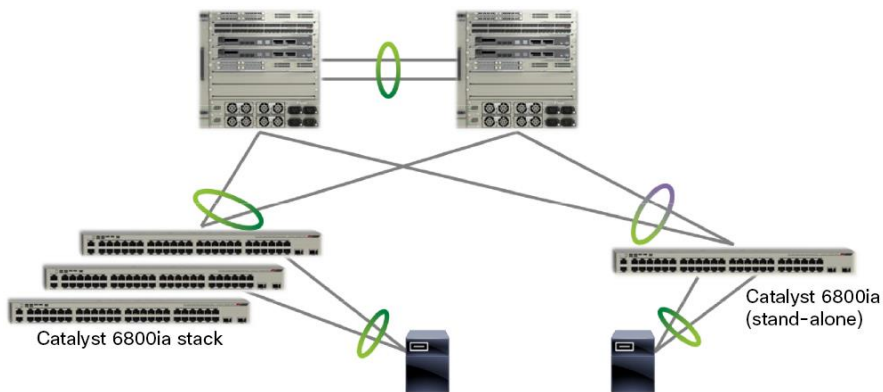


For more information about VSS Quad-Sup SSO (VS4O), refer to the white paper at [http://www.cisco.com/c/en/us/products/collateral/switches/mqx-8800-series-switches/white\\_paper\\_c11-729039.html](http://www.cisco.com/c/en/us/products/collateral/switches/mqx-8800-series-switches/white_paper_c11-729039.html).

### Downlink Port Channel on Instant Access Host Ports

Starting with Cisco IOS Software Release 15.1(2)SY2, the downlink ports on Cisco Catalyst Instant Access clients can form EtherChannels to achieve higher bandwidth as well as link redundancy. Member ports that form the port channel must be from the same FEX ID in an Instant Access domain. This allows an endpoint to dual-attach to an Instant Access client or different clients from the same stack. (See Figure 3)

**Figure 3.** Downlink Port Channel on Instant Access Host Ports



### 1 Gig Fabric Link Support for Instant Access

With Release 15.1(2)SY2, 1G SFP can be used on the uplink ports on Instant Access clients, increasing the flexibility to deploy Instant Access in constrained environments. Note that 10G fabric link is highly recommended to connect Instant Access clients with parents. 1G fabric link should be used as a last resort because the fabric link could be heavily oversubscribed.

For a list of optics that are supported on Instant Access clients, refer to this datasheet: [http://www.cisco.com/c/en/us/products/collateral/switches/catalyst-6800ia-switch/data\\_sheet\\_c78-728230.html](http://www.cisco.com/c/en/us/products/collateral/switches/catalyst-6800ia-switch/data_sheet_c78-728230.html).

For additional information about Cisco Catalyst 6800, visit:

- <http://www.cisco.com/en/US/products/hw/switches/index.html>.
- [http://www.cisco.com/en/US/products/ps715/product\\_at\\_a\\_glance\\_list.html](http://www.cisco.com/en/US/products/ps715/product_at_a_glance_list.html).
- [http://www.cisco.com/en/US/products/ps715/products\\_data\\_sheets\\_list.html](http://www.cisco.com/en/US/products/ps715/products_data_sheets_list.html).
- [http://www.cisco.com/en/US/products/ps715/prod\\_white\\_papers\\_list.html](http://www.cisco.com/en/US/products/ps715/prod_white_papers_list.html).

## Ordering Information

To place an order, visit the Cisco Ordering homepage. To download software, visit the Cisco Software Center. Tables 2 through 5 list ordering information for Cisco IOS Software Release 15.1(2)SY2.

**Table 2.** Cisco Catalyst 6800 Series Hardware Ordering Information

PID	Description
<b>C6880-X-LE-16P10G</b>	Cisco Catalyst 6880-X Multirate Port Card (Standard Tables)
<b>C6880-X-16P10G</b>	Cisco Catalyst 6880-X Multirate Port Card (XL Tables)
<b>C6807-XL-S2T-BUN</b>	Cisco Catalyst 6807-XL bundle: chassis + fan tray + Sup2T + IP Service + 2 power supplies
<b>C6807-XL</b>	Cisco Catalyst 6807-XL chassis "a la carte"
<b>C6800-XL-3KW-AC</b>	3,000W power supply for Cisco Catalyst 6807-XL chassis
<b>C6807-XL-FAN</b>	Fan tray for Cisco Catalyst 6807-XL chassis
<b>C6880-X-LE</b>	Cisco Catalyst 6880-X chassis (standard tables), fan tray, no PS, IP service
<b>C6880-X</b>	Cisco Catalyst 6880-X chassis (XL tables), fan tray, no PS, IP service
<b>C6880-X-3KW-AC</b>	Cisco Catalyst 6880-X 3KW AC power supply
<b>C6880-X-3KW-DC</b>	Cisco Catalyst 6880-X 3KW DC power supply
<b>C6880-X-FAN</b>	Cisco Catalyst 6880-X fan tray
<b>C6800IA-48TD</b>	Cisco Catalyst 6800 Instant Access - 48x1G - data
<b>C6800IA-48FPD</b>	Cisco Catalyst 6800 Instant Access - 48x1G - full PoE

**Table 3.** Cisco IOS Software Release 15.1(2)SY2 Ordering Information: Cisco Catalyst 6880-X Software Product IDs

PID	Description
<b>S68XAEK9-15102SY</b>	Cisco CAT6880-X IOS ADV ENT SERVICES FULL ENCRYPT
<b>S68XAEK9N-15102SY</b>	Cisco CAT6880-X IOS ADV ENT SERVICES NPE
<b>S68XISK9-15102SY</b>	Cisco CAT6880-X IOS IP SERVICES FULL ENCRYPT
<b>S68XISK9N-15102SY</b>	Cisco CAT6880-X IOS IP SERVICES NPE

**Table 4.** Cisco IOS Software Release 15.1(2)SY2 Ordering Information: Supervisor 2T Software Product IDs

PID	Description
<b>S2TAEK9-15102SY</b>	Cisco CAT6000-VS-S2T IOS ADV ENT SERV FULL ENCRYPT
<b>S2TAEK9N-15102SY</b>	Cisco CAT6000-VS-S2T IOS ADVANCED ENTERPRISE SERVICES NPE
<b>S2TAIK9-15102SY</b>	Cisco CAT6000-VS-S2T IOS ADVANCED IP SERVICES FULL ENCRYPT
<b>S2TAIK9N-15102SY</b>	Cisco CAT6000-VS-S2T IOS ADVANCED IP SERVICES NPE
<b>S2TIBK9-15102SY</b>	Cisco CAT6000-VS-S2T IOS IP BASE FULL ENCRYPT
<b>S2TIBK9N-15102SY</b>	Cisco CAT6000-VS-S2T IOS IP BASE NPE
<b>S2TISK9-15102SY</b>	Cisco CAT6000-VS-S2T IOS IP SERV FULL ENCRYPT
<b>S2TISK9N-15102SY</b>	Cisco CAT6000-VS-S2T IOS IP SERV NPE

**Table 5.** Cisco IOS Software Release 15.1(2)SY2 Ordering Information: Supervisor 720 Software Product IDs

PID	Description
<b>S733AE-15102SY</b>	Cisco CAT6000-SUP720 IOS ADV ENT SERV
<b>S733AEK9-15102SY</b>	Cisco CAT6000-SUP720 IOS ADV ENT SERV SSH
<b>S733AIK9-15102SY</b>	Cisco CAT6000-SUP720 IOS ADVANCED IP SERVICES SSH
<b>S733IS-15102SY</b>	Cisco CAT6000-SUP720 IOS IP SERVICES

PID	Description
<b>S733ISK9-15102SY</b>	Cisco CAT6000-SUP720 IOS IP SERV FULL ENCRYPT
<b>SV33AE-15102SY</b>	Cisco CAT6000-VSS720 IOS ADV ENT SERV
<b>SV33AEK9-15102SY</b>	Cisco CAT6000-VSS720 IOS ADV ENT SERV SSH
<b>SV33AIK9-15102SY</b>	Cisco CAT6000-VSS720 IOS ADVANCED IP SERVICES SSH
<b>SV33IB-15102SY</b>	Cisco CAT6000-VSS720 IOS IP BASE
<b>SV33IBK9-15102SY</b>	Cisco CAT6000-VSS720 IOS IP BASE SSH
<b>SV33ISK9-15102SY</b>	Cisco CAT6000-VSS720 IOS IP SERV FULL ENCRYPT

## Product Management Contact

[Cisco Catalyst 6500/6800 Marketing Team](#)

## Cisco IOS Software Center

Download Cisco IOS Software releases and access software upgrade planners at

<http://www.cisco.com/cisco/web/download/index.html>.

## Support

Cisco IOS Software Release 15.1(2)SY2 follows the standard Cisco support policy. For more information, visit

[http://www.cisco.com/en/US/products/products\\_end-of-life\\_policy.html](http://www.cisco.com/en/US/products/products_end-of-life_policy.html).

## Cisco Services

Cisco Services integrate closely with CMO teams as an essential element of any technology solution. If you have not already received targeted services content blocks for integration, contact your Cisco Services marcom manager. If you are not sure of the appropriate contact, send an email to [ca-marcom@cisco.com](mailto:ca-marcom@cisco.com).

Cisco Services make networks, applications, and the people who use them work better together.

Today, the network is a strategic platform in a world that demands better integration between people, information, and ideas. The network works better when services, together with products, create solutions aligned with business needs and opportunities.

The unique Cisco Lifecycle approach to services defines the requisite activities at each phase of the network lifecycle to help ensure service excellence. With a collaborative delivery methodology that joins the forces of Cisco, our skilled network of partners, and our customers, we achieve the best results.

## For More Information

For more information about the Cisco Catalyst 6500/6800 Series, visit the product homepage at

<http://www.cisco.com/go/6800> or contact your local account representative.




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