The Document Requiring Conformity:

Cisco IR809 Industrial Integrated Services Router

Product as Tested/Declared: Product Identifier, version/revision information, details of configuration tested.

IR809, 15.5(3)M

Product Family (other products using same IPv6 stack(s) to which these results are declared to apply). Check Product Family attestation below.

Cisco IR809 Series, Cisco IR829 Series

USGv6 Capability summary. (For each distinct IPv6 stack in the product provide a summary of its USGv6 capabilities below and include a detailed test result summary).

e.g. example-prod-id/stack-1: USGv6-v1-Host: IPv6-Base+Addr-Arch+IPsec-v3+IKEv2+SLAC+Link=Ethernet.

USGv6-v1-Router: IPv6-Base+Addr-Arch+SLAAC+Link =Ethernet

Self Contained or Composite SDOC? (Must indicate one).

Yes

Some or all of the USGv6 capabilities of this product are provided by the use and/or integration of unmodified components that have their own unique USGv6 SDOCS. All of the relevant referenced SDOCS are identified in section 8 and attached. This product's page 2 will indicate which capabilities are provided by specific referenced components (product-id/stack-id).

Additional Declarations / Attachments: (List supplier & product-id/stack-id for referenced and attached test results in the case of composite products).

Component Supplier | Product ID: | Stack ID: | Notes:
---|---|---|---
[1] | | | |
[2] | | | |
[3] | | | |
[4] | | | |

Supplementary Attestations (Answer all).

Yes This product is fully functional in dual stack environments. That is, no claimed capabilities are invalidated if this product is operated in a dual stack (6 and 4) network environment.

Yes This product is fully functional in IPv6 only environments. That is, no claimed capabilities are invalidated if this product is deployed in a network environment that does not support IPv4.

Yes This SDOC contains a capabilities test report for each unique IPv6 stack in the product. If not, the stacks/ports not covered are documented, and how their IPv6 capabilities differ from those reported are explained.

Yes All of the products listed in the product family in section 5 are implemented such that their USGv6 capabilities are identical in form and function across the entire product family. The specific conformance and interoperability test results for the USGv6 capabilities of an identified member of this product family are provided in this SDOC. The SDOC attests that these tested USGv6 capabilities are identical and unmodified for all the products cited above.

Signature: Darryll Gadson

Date: 8-Dec-15

Print Name / Title: Darryll Gadson, Lead USGv6 Cisco Systems

See instructions for fields 1-12 on Page 4.
### IPv6 Basic Requirements

- Support of IPv6 base (IPv6/ICMPv6/PMTU/ND)
  - Configuration/Host: IPv6-Base
  - Router: Basic v1.*
  - NPD: C
  - Test Suite: UNH-IOL/22369
  - USGv6-v1 Test Suite: Basic v1.*
  - Component Ref: UNH-IOL/22372

- Support of PMTU Discovery Protocol requirements
  - Configuration/Host: PMTU
  - Router: Basic v1.*
  - NPD: C
  - Test Suite: UNH-IOL/22369
  - USGv6-v1 Test Suite: Basic v1.*
  - Component Ref: UNH-IOL/22372

### IPv6 Security Requirements

- Support of stateless autoconfiguration
  - Configuration/Host: SLAAC
  - Router: Basic v1.*
  - NPD: C
  - Test Suite: UNH-IOL/22371
  - USGv6-v1 Test Suite: SLAAC-V1.*
  - Component Ref: UNH-IOL/22374

- Support of Creation of Global Addresses
  - Configuration/Host: SLAAC (c-M)
  - Router: Basic v1.*
  - NPD: C
  - Test Suite: UNH-IOL/22371
  - USGv6-v1 Test Suite: SLAAC-V1.*
  - Component Ref: UNH-IOL/22374

### Application Requirements

- Support of stateful (DHCP) address autoconfiguration
  - Configuration/Host: DHCP-Client
  - Router: DHCP Client v1.*
  - NPD: C
  - Test Suite: UNH-IOL/22370
  - USGv6-v1 Test Suite: DHCP Client v1.*
  - Component Ref: UNH-IOL/22373

- Support of automated router prefix delegation
  - Configuration/Host: DHCP-Prefix
  - Router: Self Test
  - NPD: C
  - Test Suite: UNH-IOL/22370
  - USGv6-v1 Test Suite: Self Test
  - Component Ref: UNH-IOL/22373

- Support of neighbor discovery security extensions
  - Configuration/Host: SEND
  - Router: Self Test
  - NPD: C
  - Test Suite: UNH-IOL/22370
  - USGv6-v1 Test Suite: Self Test
  - Component Ref: UNH-IOL/22373

### IPv4 Security Requirements

- Support of IP security architecture
  - Configuration/Host: IPsecv3
  - Router: IPsecv3 v1.*
  - NPD: C
  - Test Suite: UNH-IOL/22370
  - USGv6-v1 Test Suite: IPsecv3 v1.*
  - Component Ref: UNH-IOL/22373

- Support for automated key management
  - Configuration/Host: IKEv2
  - Router: IKEv2 v1.*
  - NPD: C
  - Test Suite: UNH-IOL/22370
  - USGv6-v1 Test Suite: IKEv2 v2.*
  - Component Ref: UNH-IOL/22373

- Support for encapsulating security payload in IPv4
  - Configuration/Host: ESP
  - Router: ESPv3 v1.*
  - NPD: C
  - Test Suite: UNH-IOL/22370
  - USGv6-v1 Test Suite: ESP v1.*
  - Component Ref: UNH-IOL/22373

### Network Management Requirements

- Support of network management services
  - Configuration/Host: SNMP
  - Router: Self Test
  - NPD: C
  - Test Suite: UNH-IOL/22370
  - USGv6-v1 Test Suite: Self Test
  - Component Ref: UNH-IOL/22373

### Multicast Requirements

- Support of basic multicast
  - Configuration/Host: Mcast
  - Router: Self Test
  - NPD: C
  - Test Suite: UNH-IOL/22370
  - USGv6-v1 Test Suite: Self Test
  - Component Ref: UNH-IOL/22373

- Support of mobile IP capability
  - Configuration/Host: MIP
  - Router: Self Test
  - NPD: C
  - Test Suite: UNH-IOL/22370
  - USGv6-v1 Test Suite: Self Test
  - Component Ref: UNH-IOL/22373

### Specific USGv6 Test Suite

- Support of link technology [O.1]
  - Configuration/Host: Link = Ethernet
  - Router: Self Declaration
  - NPD: C
  - Test Suite: UNH-IOL/22370
  - USGv6-v1 Test Suite: Self Test
  - Component Ref: Supplier / Product / Stack ID of distinctly tested component that provides this capability.

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11 Suppliers Declaration of Conformity for USGv6 Products: Declared Capabilities and Test Results Summary

**Product Id:** Cisco IR809 Industrial Integrated Services Router  
**Stack Id:** 15.5(3)M

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### Check Here If This Stack's SOC Includes Additional Information about Tested Capabilities and Options on an Attached Page 3 of Notes.

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**Level**  
**Color**  
**Indication of USGv6-v1 Recommended Level of Support for device type / stack role.**  
**Blank - SOC makes no declaration for this capability.** Indicates capability that is recommended as mandatory (unconditional MUST) in the USGv6-v1 Profile.  
**P** Passed required tests of USGv6-v1 requirements for these capabilities. Indicates capability that is unusual for a given device type / stack role. Do not select without careful analysis.  
**N** See notes page for details on the level of support of USGv6-v1 requirements for this capability. Indicates capability that is left optional / conditional by the recommendations of the USGv6-v1 Profile.  
**X** USGv6 capability not supported in product.

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**Test Suite -** Specific USGv6 Test suite used for test. See: [http://www.antd.nist.gov/usg6/v1-specifications.html](http://www.antd.nist.gov/usg6/v1-specifications.html)  
**Note # -** Reference to a detailed note about this capability or result on attached page.  
**Component Ref -** Supplier / Product / Stack ID of distinctly tested component that provides this capability.
<table>
<thead>
<tr>
<th>Field 13</th>
<th>Product Id:</th>
<th>Stack Id:</th>
<th>Spec / Reference</th>
<th>Section</th>
<th>USGv6-v1 Profile Requirements</th>
<th>Context / Configuration Option</th>
<th>Supported Capabilities</th>
<th>Test Suite Conformance/NPD</th>
<th>Test Lab / Result ID, Note</th>
<th>Notes about USGv6-v1 Capabilities.</th>
<th>Test Suite Interoperability</th>
<th>Test Lab / Result ID, Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</tbody>
</table>

Discussion:

Vendor's General Notes / Discussion about this Product / Stack's capabilities:
<table>
<thead>
<tr>
<th>Field</th>
<th>Description and Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Document Requiring Conformity: Identifies the profile version implemented. Not a user completeable field.</td>
</tr>
<tr>
<td>2</td>
<td>Product Identifier: Supplier's concise name for the product declared.</td>
</tr>
<tr>
<td>3</td>
<td>Suppliers Name, Address and Contact Details: Company name and point of contact for SDOC questions, street address, phone and email.</td>
</tr>
<tr>
<td>4</td>
<td>Product as Tested/Declared: Product Identifier and detailed version information. If this SDOC reports original test results (page 2), include information about the specific product configuration(s) that was actually tested (e.g., hardware configuration, operating system, etc.).</td>
</tr>
<tr>
<td>5</td>
<td>Product Family: A list of other products that use the same, unmodified IPv6 stacks such that their USGv6 capabilities are identical in form and function to the specific product configuration above. Test labs are only required to affirm the results for specific products tested. Test labs optionally may affirm recognized product families.</td>
</tr>
<tr>
<td>6</td>
<td>USGv6 Capability Summary: The USGv6 stack implementation summary as identified by the '+' notation described in the USGv6 profile, Appendix A. For each IPv6 stack implementation in the product, a distinct Stack Id and reference to the attached Results Summary page (Page 2).</td>
</tr>
<tr>
<td>7</td>
<td>Self Contained or Composite SDOC: If this SDOC relies on the test results of other distinct products, list the Supplier &amp; Product ID/Stack IDs referenced and attach those original SDOCs to this one.</td>
</tr>
<tr>
<td>8</td>
<td>Additional Declarations / Attachments: List the supplier / product ID / Stack ID of any test results of composite components referenced by this SDOC.</td>
</tr>
<tr>
<td>9</td>
<td>Supplementary Attestations: Suppliers disclosure of IPv6 only capabilities; multiple stacks present; product family applicabilities. These are not included to qualify or disqualify a product from purchase considerations, but to inform network administrators of potential configuration options relevant to USGv6 interoperability. Check all that apply.</td>
</tr>
<tr>
<td>10</td>
<td>Signature Block: Wet ink signature of the responsible product manager, dated. Printed name and position title on the line below.</td>
</tr>
<tr>
<td>11</td>
<td>Summary of Results: The format of this table mirrors the USGv6-v1.0 capabilities checklist (USGv6 Profile, Appendix A). The 12 categories of USGv6 capabilities are listed as subheadings, with subsidiary functions as line items. Configuration options related to conditional implementation of selected capabilities.</td>
</tr>
<tr>
<td>12</td>
<td>Additional Options Tested: Vendor checks if it is desired to record tested options not part of the 'Musts' in the profile. Explanations on the page following the results summary. Headings and Special Notations: as described.</td>
</tr>
<tr>
<td>13</td>
<td>Stack-1 Notes Instructions: The supplier may choose to use the Notes (page 3) in order to clarify unsupported features or non passing results. Each Note # must reference the same Note # from Page 2. Complete the Note by including the Spec/Reference and Section (i.e. RFC or USGv6 Profile version), USGv6-v1 Profile Requirements, Config Option (i.e. IPv6-Base), choosing Host/Router/NPD, and Test Selection table version along with Test Lab Result ID. The Discussion includes details about the test result that will be disclosed to the buyer.</td>
</tr>
</tbody>
</table>

Further Description: [http://www.antd.nist.gov/usgv6/testing.html](http://www.antd.nist.gov/usgv6/testing.html), and NIST SP 500-267 USGv6 Testing Program Users Guide available at the website.