



# Intel® Rack Scale Design Pod Manager

Release Notes

Software Version 1.2

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*December 2016*

*Revision 006*



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## Revision History

Revision	Description	Date
1.2	Updated version to v1.2.257.92 Updated information about new features	December 7, 2016
1.1	Updated PodM version to v1.2.257.89 Updated information about new features	September 21, 2016
1.0	Initial release.	April 5, 2016

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# 1 Introduction

These release notes are intended for the Intel® Rack Scale Design Pod Manager v1.2.257.89 September 2016 release of Intel® Rack Scale Design.

## 1.1 Software package contents

Table 1 lists the contents of the release package.

**Table 1** Software package

Title	Notes
Intel® Rack Scale Design Pod Manager Release Notes	This document
Intel® Rack Scale Design Pod Manager User Guide	User Guide
Intel® Rack Scale Design PSME REST API Specification	POD Manager REST API specifications version 1.2
LICENSE.txt	Apache License, Version 2.0
podm-sources-1.2.257.92.tar.gz	PODM Source Code

Customers should check <https://github.com/01org/intelRSD> to download the latest available onboard device drivers, system firmware, and system software. For further assistance, please contact the Intel Field Representative.

## 1.2 References

**Table 2** Reference documents

Doc ID	Title	Location
332868	Intel® Rack Scale Design GAMI API Specification	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
332869	Intel® Rack Scale Design Pod Manager REST API Specification	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
332870	Intel® Rack Scale Design Pod Manager Release Notes	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
332871	Intel® Rack Scale Design Pod Manager User Guide	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
332873	Intel® Rack Scale Design PSME REST API Specification	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
332872	Intel® Rack Scale Design PSME Release Notes	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
332874	Intel® Rack Scale Design PSME User Guide	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
332877	Intel® Rack Scale Design RMM REST API Specification	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
332876	Intel® Rack Scale Design RMM Release Notes	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
332875	Intel® Rack Scale Design RMM User Guide	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
332878	Intel® Rack Scale Design Storage Services API Specification	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
332936	Intel® Rack Scale Design BIOS/BMC Tech Guide	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
332937	Intel® Rack Scale Design Architectural Requirements Specification	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
334611	Intel® Rack Scale Design Getting Started Guide	<a href="http://intel.com/intelRSD">http://intel.com/intelRSD</a>
n/a	Scalable Platforms Management API	<a href="http://dmf.org/standards/redfish">http://dmf.org/standards/redfish</a>





## 2 New Features and Limitations

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### 2.1 New features for 1.2 release

Intel® Rack Scale Design POD Manager 1.2 Release introduces the following features:

- Multitrack support – user has ability to discover and manage multiple racks.
- Redfish API – Intel® Rack Scale Design POD Manager API and Schema build on top of Redfish API and schema version 1\_0\_0 & 1.0.0 (with Chinook extensions for Redfish).
- Separate Compute & Network Agents support – POD Manager can now support separate Compute & Network agents from PSME.
- Support for Racks exposed by PSME

It also contains following features from previous releases:

- Discovery – user can discover compute, storage and network assets through POD Manager REST API.
- Assembly – user is able to create server node which can be assembled based on selected template (using JSON).
- Boot – Remote and local bare metal boot of logical node (iSCSI target or local boot with M.2, support iPXE boot).
- Security support for northbound REST API – HTTP basic authentication with HTTPS channel security.
- Deep Discovery using Linux\* Utility Image – Intel® Rack Scale Design POD Manager has ability to obtain additional data about blade and its sub resources available only from booted OS. User has possibility to configure or disable this functionality. Please, be advised that this operation can take considerable amount of time – it depends on boot duration of BIOS / BMC and used hardware.
- VLAN support – user is able to add / remove VLANs on Network Interfaces.
- Link Aggregation Group support – user is able to add / modify / remove LAG on Switch Ports.
- Software update – user have possibility to upgrade Intel® Rack Scale Design POD Manager Software in the field using deb packages.
- Hot insertion / removal – support for insertions and removals of Rack assets (e.g. Power Supply Units, Fans, Drawers, Sleds, Disk Drives) provided by events sent by PSME, Storage Service and RMM.
- Security support for southbound REST API – using trusted certificate signed by Certificate Authority to communicate with PSME, Storage Service and RMM.
- RMM integration – reading thermal and power data. It also provides rack and drawer information and sends update, insertion and removal events.



## 2.2 Limitations

The following list describes all the limitations for this Intel® Rack Scale Design release (described limitations are target for future releases):

- The code was tested with PSME version 1.2.404.93.
- Due to the changes in REST API, this PODM version might not work with previous PSME version.
- Code is based on RedFish API which is still in development (latest supported version: 1.0.0).
- Discovery process is based on DHCP.
- IP address of Composed Node is not exposed via REST API - it depends on booted OS, and is outside the scope of Pod Manager.
- While reading PSME REST API, PODM may omit values presented by BMC or PSME that are not allowed to be exposed (e.g bad enum value).
- PODM does not provide direct API which allows to:
  - Create/Remove VLAN (available only with assembly action)
  - Create/Update/Remove LogicalDrive/RemoteTarget (creating is available only with assembly action)
  - Set RackPUID





## 3 Known Issues

The 'Status' field can be one or more of the following.

**Table 3** Status descriptions

Under Investigation	The sighting is being investigated.
Root Cause Identified	The root cause for the defect is identified.
Workaround Available	A temporary solution to the defect is provided until the bug is fixed.
As Designed	The issue reported is not a defect and the behavior will not be modified.
Closed no repro	The situation was not observed anymore and no further investigation is scheduled
Fixed	Already fixed

Table 4 presents problems and issues found during testing of this release.

**Table 4** Known issues

Issue	Description
<b>HSD80606</b>	<b>User is not able to recreate storage management and data center VLANs after adding LAG</b>
Problem	After creating LAG, all VLANs on ports which were used for LAG are removed (this includes management VLANs needed for Intel® Rack Scale Design).
Implication	Unable to recreate storage management and data center VLANs.
Note	PSME
Workaround	Two workarounds are available: <ul style="list-style-type: none"><li>• After LAG creation or removal Admin has to login to the Drawer OS and add management VLANs to RRC manually via command line.</li><li>• After LAG creation or removal Admin has to go to PSME REST API and add management VLANs manually.</li></ul>
Status	Root Cause Identified
<b>HSD87448</b>	<b>Existing assembled Nodes and Systems do not survive rack power cycle</b>
Problem	After powering off and on whole rack, all existing systems are recreated and all nodes are powered off.
Implication	All assembled nodes are in operational.
Note	PODM
Workaround	User should clear PODM database and recreate all previously assembled nodes manually.
Status	Workaround Available
<b>HSD92343</b>	<b>POD sometimes returns Target without link to logical drive</b>
Problem	Sporadically PODM return information about Target without link to Logical Drive
Implication	User will not be able obtain information about logical drive used in Target
Note	PODM
Workaround	User should retry his query on this asset
Status	Workaround Available
<b>HSD92994</b>	<b>Pod throws 500 internal server error after querying valid resource</b>
Problem	Sporadically PODM returns HTTP 500 Code on valid resource
Implication	User will not be able obtain information about valid resource
Note	PODM
Workaround	N/A
Status	As Designed
<b>HSD93075</b>	<b>POD returns 500 InternalServerError during LAG creation despite the fact the LAG was created</b>
Problem	Sporadically after creation of LAG port PODM manager return HTTP 500 Code even tough LAG port was created successfully.
Implication	User may be confused by error message even tough creation succeeded.
Note	PODM





Issue	Description
Workaround	User should check (after about 1 minute) if creation of LAG really failed.
Status	Under Investigation
<b>HSD93231</b>	<b>Composed node goes into Failed state during assembly process</b>
Problem	Sporadically as a result of assembly process composed node can be in Failed state.
Implication	Composed Node is not usable.
Note	PSME
Workaround	N/A
Status	Fixed
<b>HSD98444</b>	<b>Sporadic Internal Server Error while getting collection of Devices</b>
Problem	Repeating Deep Discovery on specified ComputerSystem may sporadically cause that getting collection of Devices will fail with Internal Server Error.
Implication	Cannot obtain properties of Local Drives.
Note	PODM
Workaround	N/A
Status	Under Investigation
<b>HSD98075</b>	<b>LAG members do not change their AdministrativeState to Up after LAG creation</b>
Problem	After creating LAG, members of new port are not updated immediately but during slow poll (10 minutes max by default)
Implication	It is not guaranteed that the state of new LAGs is up to date before configured time.
Note	PODM
Workaround	Try re-configuring slow poll frequency
Status	Root Cause Identified
<b>HSD98017</b>	<b>Internal server error response code 500 during LAG creation</b>
Problem	Creating LAG may sporadically fail with 500 status code.
Implication	LAG will not be created
Note	PODM
Workaround	This issue is sporadic in nature. Try LAG creation one more time.
Status	Under Investigation
<b>HSD101075</b>	<b>Wrong properties name in PODM REST API</b>
Problem	Following properties exposed in northbound PODM REST API are not compliant with metadata: <ul style="list-style-type: none"> <li>Property PowerSupplies-&gt;Model in PowerZone, should be ModelNumber</li> <li>Property PowerSupplies-&gt;FirmwareVersion in PowerZone, should be FirmwareRevision</li> <li>Property VendorId in Memory, should be VendorID</li> <li>Property OperatingSpeedMHz in Memory, should be OperatingSpeedMhz</li> <li>Property DeviceId in Memory, should be DeviceID</li> <li>Unexpected key ManagerInChassis in property Links in Manager</li> </ul>
Implication	POD Manager northbound REST API is not compliant with metadata
Note	PODM
Workaround	N/A
Status	Fixed
<b>HSD100150</b>	<b>Metadata is not compatible with the specification</b>
Problem	Some properties should have annotation about ReadWrite permission according to API specification
Implication	Metadata is not compatible with the specification
Note	PODM
Workaround	N/A
Status	Fixed