

## / SOFTWARE RELEASE NOTES

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SmartOS 10.8.4.1

**Models:** SE80ac, SR400ac, SR905ac, SR905acv

March 2020

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## SmartOS SW Revision Summary

Firmware	Description	Date
10.8.4.1	Various fixes and enhancements; see lists for details.	03/31/20
10.8.3.1	Various fixes and enhancements; see lists for details.	01/30/20
10.7.1.1	Various fixes and enhancements; see lists for details.	06/28/19
10.6.7.1	Various fixes and enhancements; see lists for details.	03/22/19
10.6.3.1	Various fixes and enhancements; see lists for details.	11/29/18
10.5.4.1	Various fixes and enhancements; see lists for details.	08/30/18
10.5.2.1	Various fixes and enhancements; see lists for details.	06/29/18
10.4.7.1	Various fixes and enhancements; see list for details.	03/5/18
10.3.8.1	WebUI redesign; enhanced features.	06/30/17
10.2.1.1	Initial GA Release for SR400ac.	06/30/16

## SR400ac/SR90xxx Product Description

- Gigabit Residential Gateway
- 1x Gigabit Ethernet WAN
- 1x SFP WAN (SR900ac only)
- 4x Gigabit Ethernet LAN
- Dual-band concurrent WiFi (5GHz, 2.4GHz)
  - SR400ac: 3x3 11n + 3x3 11ac
  - SR900ac: 4x4 11n + 4x4 11ac
- 1x USB2
- 1x USB3

## SR400ac/SR905xxx Features

- WAN Configuration Modes: DHCPv4, Static, PPPoE
- WAN VLAN Tagging Modes: Untagged, Tagged, Double Tagged (QinQ)
- TR-069 Management (TR-181 data model) with STUN
- HTTP Interface
- CLI Interface via SSH
- Smart Modem Manager (hairpin redirect to upstream WAN device)
- NAT/Firewall
- IGMP Snooping
- IGMP Proxy (v2/v3)
- IPv6
- NetData statistical graphs
- VoIP: SIP (SR905acv only)

## SE80ac Product Description

- Intellifi® Mesh WiFi Wall-plug Satellite
- 1x Gigabit Ethernet
- Dual-band concurrent WiFi (5GHz, 2.4GHz)
  - 2x2 11n + 2x2 11ac

## Revision 10.8.4.1

### *New Features and Improvements in 10.8.4.1*

The new features included in release 10.8.4.1 are listed below, grouped by module.

- TR69 firmware management of Intellifi® satellites behind SoS router
- Link quality display on Intellifi® device page
- Improved WebUI Loading Indicators
- Wi-Fi Overrides for Intellifi® Satellites (chan, htmode, tx power)
- Auto WPS
- TR181: Device.WiFi.NeighboringWiFiDiagnostic
- TR181: Added topology data to Device.Hosts
- TR181: Device.WiFi.MultiAP.
- 802.11kvr on SE8x
- Network Performance Testing (NPT) interop with Device Manager
- Improved VoIP WebUI
- Voice Connection Test

### *Enhancements in 10.8.4.1*

Ref ID	Description
OWRT-4791	Enhancement to add TR-181 objects to display Intellifi® Satellite information
OWRT-4793	Improvement to support upgrade of SE80ac device via DM through manifest configuration
OWRT-4848	Enhancements and changes to login page to fix link to EULA and update copyright.
OWRT-4857	Enhancement to provide feedback for slower connection in the GUI as indication something is working in the background.
OWRT-4863	New feature adding PPP configurable parameters to the GUI.
OWRT-4890	Enhancement for VoIP GUI of SR905acv by moving non-standard items from main to advanced page(s)
OWRT-4917	Enhancement by adding CLI command to dump full TR-181 data model for troubleshooting.
OWRT-4943	Improvements to the SIP GUI on the SR905acv
OWRT-4991	Enhancement to make WiFi QuickStart Restore device to factory settings more visible.
OWRT-5045	Addition of Network Performance Test implementation
OWRT-5124	Enhancement to allow you to click anywhere to close the Intellifi® detail sidebar.
OWRT-5129	Enhancement to improve the quick start operating/Intellifi® mode selection experience.
OWRT-5134	Enhancement to force 5GHz Mesh Backhaul and parameters to set max hops for Mesh Daisy Chaining.
OWRT-5204	Enhanced user experience on WiFi Quick Start by making the set password and re-configure mode password screens more obvious.

### Fixes in 10.8.4.1

Ref ID	Description
OWRT-4936	Addressed issue with SE80ac download failing from GUI, but working from shell
OWRT-4940	Addressed issue with UI modals from sidebar not showing in Intellifi® devices page with Safari Browser
OWRT-4982	Addressed issue with warning message being displayed for Intellifi® topology button when WAN is disconnected.
OWRT-5000	Addressed issue with Pause/Play functionality not working in satellite devices
OWRT-5006	Addressed issue with connected wired or wireless LAN clients connected to hub or satellite displaying N/A for the uplink field in the Intellifi® page.
OWRT-5130	Addressed issue by removing WiFi Quick-start operating mode drop-down support for the option Router.
OWRT-5206	Addressed issue with the firmware upgrade progress bar not being visible on the topology devices page

### Known Issues in 10.8.4.1

Ref ID	Description
OWRT-4403	Limited maximum WiFi throughput on SE80ac
OWRT-5212	Intellifi® max hop count settings do not function as expected
OWRT-5217	Intellifi® Topology screen/button can sometimes display Error message
OWRT-5235	SE80ac LED indicator can show improper signal quality feedback vs Web UI.

### Release Images for 10.8.4.1

SR400ac:

- **Filename:** SmartOS-SR400ac-v10.8.4.1-factory.img
- **md5sum:** eca020f446076fda9c654d4678036e89

SR900ac/SR905ac:

- **Filename:** SmartOS-SR900ac-v10.8.4.1-factory.img
- **md5sum:** b5ed06a9a899ecd4c856f0b968b36568

SE80ac:

- **Filename:** SmartOS-SE80acac-v10.8.4.1-factory.img
- **md5sum:** 2464777d7d81f963e3f1c329cfc9b423

## Revision 10.8.3.1

### *New Features and Improvements in 10.8.3.1*

The new features included in release 10.8.3.1 are listed below, grouped by module.

- Intellifi®
  - WiFi Pairing of SE80ac via QuickStart (WPS and manual uplink selection)
  - SE8x placement indicator via LED
  - New auto-channel algorithm
  - Hide mesh backhaul SSIDs
  - SE80ac WiFi Performance Improvements
  - Additional WiFi overrides for satellites
  - Redesigned Intellifi® Devices page, with faster/smooth refresh and simple/detailed view
- POTS
  - GUI Call History
  - DNS, SRV, Proxy Geo Redundancy Improvements
  - Additional GUI DNS, SRV utilities, diagnostics
  - Additional TR-104 params, support
  - Configurable AlertInfo prefix in GUI
  - DTMF Relay, Modem passthrough improvements
  - T.38 switching improvements
  - Additional support for simservs+xml application type
  - Support for multiple xconnect services (by CDT)\*
  - AutoLAN (by CDT)\*
  - Improved SR905 2.4GHz & 5GHz Wi-Fi stability and performance

\*Enabled on per-CDT basis

### *Enhancements in 10.8.3.1*

Ref ID	Description
OWRT-3608	Enhancement to add distinctive call waiting.
OWRT-3633	Enhancement to support Multicast via the SE80ac satellite.
OWRT-3635	Enhancement to the SE80ac Quick Start by adding a button allowing user to configure device.
OWRT-4198	Enhancement to VoIP by adding bi-directional CED detection.
OWRT-4297	Enhancement for navigation to the Intellifi® Devices/Topology Map by placing button on main page instead of buried in the device menu.
OWRT-4356	Enhancements supporting units to the Dashboard Network Activity chart.
OWRT-4387	Enhancement to the SE80ac web page to view the version number.
OWRT-4418	Enhancement for additional parameters to control T.38 to voice switching to provide more flexibility.
OWRT-4424	Enhancements to the Reboot WebUI page.
OWRT-4434	Enhancement to improve the VoIP diagnostics info in the WebUI.

Ref ID	Description
OWRT-4442	Enhancement to improve side menu toggle state when navigating pages with smaller window size.
OWRT-4462	Enhancement to add the capability to Clear Inactive devices from the table.
OWRT-4506	Enhancement to add SIP Alert-Info Prefix string parameter to the global VoIP GUI.
OWRT-4520	Enhancement to VoIP providing the ability to generate DTMF tone on receipt of RFC-2833 DTMF packets or SIP INFO DTMF message.
OWRT-4521	Enhancement in VoIP since OOB DTMF timing/duration didn't follow the original tone.
OWRT-4587	Enhancement for OOB DTMF start/end event-based digit detection vs packet-based detection.
OWRT-4620	Enhancement which enables a user to reset their PPPoE session from the Network Status page via a button on the WebUI.
OWRT-4625	Enhancement to add call history for VoIP.
OWRT-4791	Enhancement to add TR-181 objects to display Intellifi® Satellite information.
OWRT-4819	Enhancement to check VoIP connection via CLI.

### Fixes in 10.8.3.1

Ref ID	Description
OWRT-3516	Addressed issue with Time Zone changes from Device Manager not working properly.
OWRT-3853	Address issue with POTS LED's for VoIP not properly disabling when device is in LED stealth mode.
OWRT-3865	Address issue with POTS LED's for VoIP not properly disabling when device is in LED stealth mode.
OWRT-3985	Address issue with PPPoE over IPv6 Stateful configuration not working properly.
OWRT-4120	Address VoIP causing 2-way calls to get into a transcoding state.
OWRT-4157	Address issue causing the wrong server name being displayed under Services > DLNA page in SR905.
OWRT-4183	Address issue causing Hostnames changing to N/A when you move from an unassigned group to new group.
OWRT-4196	Address issue with the SR905 in which the 5GHz radio would not start at boot.
OWRT-4267	Address migration issue from 10.7.x.x to 10.8.x.x causing unexpected changes to WiFi parameters.
OWRT-4315	This and related issue OWRT-4532 have been resolved.
OWRT-4328	Address issue with Intellifi® client details not being visible in dark/night mode.
OWRT-4332	Address issue not being able to assign Access Schedule for Groups.
OWRT-4364	Address issue with the SR905acv with VoIP distinctive ringing not working.
OWRT-4392	Addressed issue restricting the ability to set the admin password on the SE80ac via WiFi quick-start.
OWRT-4397	Address issue with the VoIP logger within the WebUI missing some outbound response messages.
OWRT-4419	Address issue with the Intellifi® satellite sidebar not supporting the capability to vertically scroll providing a poor user experience.
OWRT-4450	Address issue with users unable to edit the configured Hosts under the services tab



Ref ID	Description
OWRT-4453	Address issues in the WebUI for French translation support.
OWRT-4456	Address issue with LAN->Service Ports displaying nothing.
OWRT-4461	Address webUI issue populating bandwidth mode properly on the SR905acv using custom CDT.
OWRT-4482	Address issue in the WebUI under On Services > DDNS > Add/Edit Item dialog - Enter DNS provider checkbox did not work.
OWRT-4502	Address issue with IPv6 displaying incorrect status.
OWRT-4537	Address issue with Time Zone changes from Device Manager not working properly.
OWRT-4541	Address issue with configuration of Static WAN IP causing the dashboard and the WAN IP address in the footer of the WebUI to not work properly.
OWRT-4544	Address issue which allowed the user to configure invalid VLAN ID's in Tagged mode.
OWRT-4547	Address issue which allowed the same SSID to be on both radios when dual-band primary was disabled.
OWRT-4550	Added validation so when pressing 'Apply' if: 1) More than one Enabled service is set to 'Untagged' 2) More than one Enabled service is set to 'Tagged' with the same VLAN value  then an error will be displayed and config changes will not be saved until above issues are fixed.
OWRT-4558	Address issue with some pages not being translated to Spanish properly.
OWRT-4574	Address issue with WiFi radios failing to start at boot.
OWRT-4696	Address issue with the Apply/save pop-up appearing when just navigating certain screens.
OWRT-4714	Address issue with the Dashboard Gauge theme not updating when toggling between dark mode on a non-dashboard page.
OWRT-4721	Addressed VoIP issue on the SR905acv with G.726 packets dropping due to conflicting payload type with OOB DTMF.
OWRT-4761	Address issue enabling the ability to edit and save Invalid MAC addresses within the Firewall Rules.
OWRT-4789	Address migration issue with WAN HTTP configuration from 10.6.7.1 to 10.8.x.x.

### Release Image for 10.8.3.1

SR400ac:

- **Filename:** SmartOS-SR400ac-v10.8.3.1-factory.img
- **md5sum:** a134dd76797308841536902ad02f675a

SR900ac/SR905ac:

- **Filename:** SmartOS-SR900ac-v10.8.3.1-factory.img
- **md5sum:** 08930114579770507ca2102269f3a9ce

## Revision 10.7.1.1

### *New Features in 10.7.1.1*

The new features included in release 10.7.1.1 are listed below, grouped by module.

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<b>Services</b>	<ul style="list-style-type: none"><li>• Service Model: 5 isolated services</li><li>• Auto-WAN</li><li>• PPPoEv6</li><li>• p-bit configurable for all services</li></ul>
<b>DSL</b>	<ul style="list-style-type: none"><li>• Bonded VDSL</li><li>• DSL bridge mode</li><li>• ATM/PTM auto-detection</li><li>• Support for VRX517/518</li></ul>
<b>WiFi</b>	<ul style="list-style-type: none"><li>• Scheduled background channel scans</li><li>• Hitless channel hop after scan</li><li>• Active Band Steering (Intel only)</li><li>• MAC filtering (whitelist, blacklist)</li><li>• Client Isolation</li><li>• 6 configurable SSIDs</li><li>• Video VAP</li></ul>
<b>WebUI</b>	<ul style="list-style-type: none"><li>• Connection Lost notification</li><li>• 1-click network restart</li><li>• 1-click PPP restart</li><li>• Improved Spanish translations</li><li>• Improved French translations</li><li>• Firewall rules selectable from list</li><li>• Layout improvements</li></ul>
<b>Management/Security</b>	<ul style="list-style-type: none"><li>• HTTPS for WebUI</li><li>• TR-069 Interop for Pace-2wire</li><li>• Config file encryption configurable via CDT</li><li>• Configurable TR069 Serial Number</li><li>• 1400+ new TR181 data model objects</li><li>• Ability to upload new custom-defaults via webUI (support user)</li><li>• TR-069 Digest Authentication</li></ul>
<b>POTS</b>	<ul style="list-style-type: none"><li>• IMS POTS interop</li><li>• Local signaling of class features</li></ul>

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- TR-104
- SIP geo redundancy
- T38 Fax
- Fax/Modem passthrough
- Fax/Modem call-waiting block
- Codecs G.729, G.726
- Codec prioritization
- Configurable hook timers
- Configurable SIP timers
- Configurable SIP DTMF modes
- Early media
- Vertical Service Code escaping
- SIP provisional message reliability
- Mexico localization
- User configurable local and/or remote call forwarding options; unconditional, busy, no-answer
- SIP call hold + GUI config options
- Local call park and retrieval + GUI config options
- Solicited and unsolicited MWI and AMWI + GUI config options
- Additional GUI status and diagnostics
- Automatic firewall rules per voip config
- Support for T.38 and SRV dynamic capture filters (for Cloudshark)
- LED and DialTone improvements to follow SIP registration and hook states.
- UK POTS
- Spain POTS
- Support for international R+digit multi-party call features
- Per codec Silence Suppression
- Configurable PRACK support

**System/Other**

- SR652ac HW support
- SR652ac manufacturing features
- Optimized boot time
- Packet Capture (alpha)
- CPU temperature history monitor

**SE80ac (IFI SAT mode only)**

- Dual-band WiFi extender with Eth or WiFi backhaul
- IFI 1.0 feature set plus IFI pairing via WiFi Quickstart or (Ethernet) Setup Cable
- Automated recovery mode via SmartOS gateway if corrupted during upgrade
- IPTV multicast (routed video only)

### Limitations in 10.7.1.1

The following limitations apply to release 10.7.1.1:

- SR905x, SR652ac models do not support WiFi backhaul when operating as Intellifi® HUB
- SE80acac must operate as Intellifi® Satellite (Intellifi® HUB and Standalone modes not yet supported)
- Bridged multicast IPTV is not supported across Intellifi® Satellites (wired or WiFi)

### Known Issues in 10.7.1.1

The following issues are known for release 10.7.1.1.

Ref ID	Description
OWRT-4094/4115/4117	SR400ac crash/reboot under heavy load with large number of Intellifi® satellites. Device may reboot.
OWRT-3876	“rate not found” messages written to system log during WiFi restart.
OWRT-3997	WiFi driver crash on SR905 and SR652ac during stress test. Auto-recovery within 5 secs.
OWRT-4162	Packets can be bridged between LAN and Guest networks on SR400ac.
OWRT-4118	SR652ac fails to sync 35b with medium range loops.
OWRT-4137	RSSI of SE80ac satellite is not reported on the Intellifi® topology.
OWRT-4022	VoIP: Inband DTMF is broken on SR905x and SR652ac.
OWRT-3836	Network Activity graph on dashboard may fail to load in Firefox browser.

### Enhancements in 10.7.1.1

Ref ID	Description
OWRT-3986	Launch quickstart on client association to Setup SSID
OWRT-3688	Set default guest wifi password to ‘12345678’
OWRT-4023	Add UK CW tone
OWRT-3968	VoIP: add G729A/B and VAD
OWRT-3973	Add 3-way digital services and flash key sequences
OWRT-3964	Add new button test mode for manufacturing
OWRT-3863	Make p-bit configurable per service
OWRT-3598	Add webUI control to set POTS country code
OWRT-3817	Add autoscan support to BRCM wifi
OWRT-4127	ETSI VMWI Alert signal
OWRT-4138	VoIP: Add configurable CED detection when in T.38 fax
OWRT-4139	VoIP webUI: T.38 CED tone switch

Ref ID	Description
OWRT-4145	VoIP: Add ability to change SDP during call with re-invite

### Fixes in 10.7.1.1

Ref ID	Description
OWRT-3718	Backup config corrupted in 10.7.x
OWRT-3150	SR400ac misreports ethernet link speeds
OWRT-3145	Improve default WiFi rates
OWRT-4008	SR400ac Wifi config corrupted on upgrade from 10.4 to 10.7
OWRT-3993	Quickstart WAN status is misreported
OWRT-3990	High CPU usage on SR652ac with DSL WAN
OWRT-3730	VoIP - SIP subscriptions should attempt to follow related user peer if available for outbound dialogs
OWRT-3350	Port Forwarding entries are not pushed from ACS to device correctly
OWRT-3374	VoIP - No Dial tone (FIFO full)
OWRT-3578	Hubmaster memory leak
OWRT-3720	VoIP: 3wc mixer continues mixing after onhook
OWRT-4033	VoIP - Suppress redundant SDP updates, INVITE messages for hold/unhold dialogs
OWRT-4057	VoIP: Disabled VAD when stack transcodes
OWRT-4169	VoIP: After T.38 rejection, T.38 re-invites should stop
OWRT-4038	Javascript error when changing DHCPv6 mode to disabled and Router Advertisement to unmanaged

### Release Image for 10.7.1.1

SR400ac:

- **Filename:** SmartOS-SR400ac-v10.7.1.1.img
- **md5sum:** ca073e0a69a5dfcf4830864282e26f2f

SR900ac/SR905ac:

- **Filename:** SmartOS-SR900ac-v10.7.1.1.img
- **md5sum:** 5e7a0ecb95b8a3948caff930ca97f0d0

## Revision 10.6.7.1

### *New Features in 10.6.7.1*

- Band Steering on the SR905 platforms
- Release of the SR905acv product

### *Enhancements in 10.6.7.1*

Ref ID	Description
OWRT-3625	Support for Active BandSteering on the SR905 platforms
OWRT-3256	Add Dark Node Theme Toggle for the GUI
OWRT-3078	Enhancement for VoIP Register to continue post 403
OWRT-2755	Enhancement to Netdata Dashboard to support Language translation
OWRT-3776	Modified the Copyright date o the GUI from 2018 to 2019.

### *Fixes in 10.6.7.1*

Ref ID	Description
OWRT-3520	Addressed Interop issue with some older devices that wouldn't handle WiFi PMF frames properly.
OWRT-3048	Addressed issue with the Internet LED staying enabled in Stealth mode after upgrade.

### *Release Image for 10.6.7.1*

SR400ac:

- **Filename:** SmartOS-SR400ac-v10.6.7.1.img
- **md5sum:** c1a8c001c14a0cb6a289f05ebd505238

SR900ac/SR905ac:

- **Filename:** SmartOS-SR900ac-v10.6.7.1.img
- **md5sum:** f396b9ff4865c9aaec7155cce044ec07

## Revision 10.6.3.1

### *New Features in 10.6.3.1*

- HW support for SR905ac and SR905acv
- HW support for SR652ac
- Bonded VDSL (17a) on SR652ac

- Integration of UGW 7.4.1 (IPTV Improvements)
- Manufacturing Support for SR905ac, SR652ac
- WiFi support for AUS
- ADSL/ATM
- DSL Vectoring on SR900ac, SR905ac, SR652ac
- Advanced POTS features
- Huawei IMS POTS interop
- Improved Language Support (20 languages)
- Advanced Upstream QoS (Beta) on SR900ac, SR905ac, SR652ac

### Enhancements in 10.6.3.1

Ref ID	Description
OWRT-1885	Added support for French GUI
OWRT-2477	Enhanced image validation for Firmware downloads via TR-069
OWRT-3196	Enhanced capability to view data Analytics when two WAN services are configured.
OWRT-3195	Implement bi-directional client command to set WiFi Radio Channel via Analytic platform
OWRT-2505	Enhanced capability of SFP WAN Optical Stats
OWRT-2970	Enhanced capability of support for Hairpin NAT
OWRT-3196	Enhanced capability to view data Analytics when two WAN services are configured.
OWRT-2477	Enhanced image validation for Firmware downloads via TR-069
OWRT-2486	Enhancement by adding DSL Uptime Counter within UI
OWRT-3063	Enhancement by adding extension handling for dialing the local number
OWRT-2846	Enhancement by adding toggle for Stealth firewall mode
OWRT-3035	Enhancement by adding VoIP - TR104 - checks for empty UCI list for digit map
OWRT-2483	Enhancement by adding WPS support for the SR900ac
OWRT-2577	Enhancement for Intellifi® by adding display of WiFi Guests on topology
OWRT-3220	Enhancement for VoIP SpeedDial8 adding capability to toggle on/off in GUI
OWRT-2304	Enhancement for VOIP by adding Asterisk Logging
OWRT-2600	Enhancement for VoIP by adding local call waiting support
OWRT-2599	Enhancement for VoIP by adding local conference call support (3way, attended CT, etc)
OWRT-2923	Enhancement for VoIP by adding Local support for anonymous call blocking
OWRT-2601	Enhancement for VoIP by adding local support for ATTENDED call transfer
OWRT-2783	Enhancement for VoIP by adding Local support for BLIND call transfer
OWRT-2865	Enhancement for VoIP by adding local support for 'call forwarding' busy, no-answer, all
OWRT-2844	Enhancement for VoIP by adding local support for 'Call Hold, Call Park'
OWRT-2831	Enhancement for VoIP by adding local support for 'Cancel Call Waiting' per call
OWRT-2904	Enhancement for VoIP by adding local support for 'do not disturb' feature



Ref ID	Description
OWRT-2918	Enhancement for VoIP by adding Local support for speed dial extensions, speed dial entry input, etc.
OWRT-2866	Enhancement for VoIP by adding the Asterisk UCI module
OWRT-2739	Enhancement for VoIP by adding TR-104 support for Calling Features objects
OWRT-2901	Enhancement for VoIP by exposing Call Park options
OWRT-2899	Enhancement for VoIP by exposing Call Transfer and 3way options
OWRT-2903	Enhancement for VoIP by exposing Call waiting and CWCID config options
OWRT-2900	Enhancement for VoIP by exposing Cancel call waiting per call feature
OWRT-2897	Enhancement for VoIP by exposing DTMF options per line (in-band, INFO, 2833)
OWRT-2447	Enhancement for VOIP by exposing SIP auth username option to users
OWRT-2928	Enhancement for VoIP to expose GUI configuration for local call feature suite.
OWRT-2494	Enhancement of adding a knob to disable DHCP-assigned DNS server IPs.
OWRT-2745	Enhancement to Display Firmware Upgrade history in the GUI
OWRT-3110	Enhancement to Enable vectoring for all SmartOS DSL products.
OWRT-3073	Enhancement to make DSL stats page columns dynamic based on number of lines
OWRT-2622	Enhancement to Pre-populate WiFi Quick-start fields when in reconfigure mode
OWRT-3080	Enhancement to Translate Dashboard gauge titles (Network Activity, WAN/WiFi Down/Upstream) when selecting another language.
OWRT-3003	Enhancement to VoIP - Feature status and value field become greyed out if/when disabled.
OWRT-3043	Enhancement to VoIP by adding from domain which was missing from Registration
OWRT-2902	Enhancement to VoIP by exposing block caller id per call
OWRT-2995	Enhancement to VoIP by making CW tone limit, no-limit, and interval configurable

### Fixes in 10.6.3.1

Ref ID	Description
OWRT-2108	Address issue with Access schedule and Device groups not working properly on the SR90x platforms
OWRT-3427	Address issue with Cloud storage displaying Network down after time server sync'd properly. This is only after Firmware migration.
OWRT-3095	Address issue with CWMP client sending wrong connectionRequestURL when WAN is configured as PPPoE
OWRT-2542	Address issue with DLNA not working after reboot on the SR90x.
OWRT-3314	Address issue with Interface duplex speed reporting wrong in some cases.
OWRT-2841	Address issue with not being able to disable video WAN once enabled.



Ref ID	Description
OWRT-2891	Address issue with NTP config not saving properly
OWRT-2942	Address issue with OSI signal (forward disconnect) not being generated when the remote party goes on-hook.
OWRT-3142	Address issue with P-bit configuration option for Internet WAN.
OWRT-565	Address issue with pushing port forward entries from the ACS not updating the gateway properly.
OWRT-2329	Address issue with restrict Source not working in Modem Manager
OWRT-2961	Address issue with selecting different languages within the GUI.
OWRT-1364	Address issue with Static reservations not being pushed properly to the gateway from the ACS.
OWRT-3154	Address issue with the connected Clients drop-down doesn't display clients connected to the guest SSID.
OWRT-3019	Address issue with VoIP - Set default 'no answer timeout' when call fwd no ans is both enabled/disabled.
OWRT-3398	Address issue with VoIP Call Park Retrieval, park index on pickup could be incorrect
OWRT-2986	Address issue with VoIP Gain control not working
OWRT-3082	Address issue with VoIP ring signal adjustment
OWRT-2930	Address issue with VoIP using the incorrect default ring cadence
OWRT-2083	Address issue with WPS push button support for SR900ac
OWRT-2983	Addressed by the new coef file tracked under OWRT-3064.
OWRT-3168	Addressed GUI issue on the SR900ac VoIP RX/TX gain values should be negative.
OWRT-2953	Addressed issue in VoIP to Reset voice feature states to their defaults when local handling of the feature is toggled to off.
OWRT-3286	Addressed issue when which caused Intellifi® to be re-enabled if AP mode was selected.
OWRT-3044	Addressed issue with certain VOIP phones may detect false ring signal when both lines are not enabled.
OWRT-3054	Addressed issue with LAN clients details not updating properly in the SR400ac
OWRT-3350	Addressed issue with port forwards not being pushed correctly from the ACS
OWRT-3343	Addressed issue with the LAN DHCPv6 Server enable/disable configurations not being saved properly.
OWRT-3007	Addressed issue with the SR400 & SR90x Ethernet MaxBitRate/CurrentBitRate reporting incorrect value from CWMP client
OWRT-3334	Addressed issue with the SR905ac WPS button not properly functioning.
OWRT-2861	Addressed issue with the WAN status reporting DOWN when changing WAN mode from untagged to tagged
OWRT-2952	Addressed issues to support Digest Authentication on the SR90x products.

Ref ID	Description
OWRT-3140	Addressed issues with the DSL and Internet LED's not functioning properly on the SR90x products.
OWRT-3335	Addressed SR400ac Intellifi® roaming issue were packets could be dropped.
OWRT-3052	Disabled 5GHz WiFi channels 120,124,128 for Australia.

### *Release Image for 10.6.3.1*

SR400ac:

- Filename: SmartOS-SR400ac-v10.6.3.1.img
- md5sum: 0077b81c16748da00141bb6954bba76a

SR900ac/SR905ac:

- Filename: SmartOS-SR900ac-v10.6.3.1.img
- md5sum: 77aaabdf8f7fad57f7df13e53ab05e23

## Revision 10.5.4.1

### *New Features/Enhancements in 10.5.4.1*

- Not applicable; this revision is a hot-fix for 10.5.2.1.

### *Fixes in 10.5.4.1*

Ref ID	Description
OWRT-2477	Addressed problem affecting Upgrade via TR-069

### *Release Image for 10.5.4.1*

SR400ac:

- Filename: SmartOS-SR400ac-v10.5.4.1.img
- md5sum: 8a1f2fe5020909f9fef6a9c5864e1998

SR900ac:

- Filename: SmartOS-SR900ac-v10.5.4.1.img
- md5sum: b7e8ac1361a5f21a1be58712caab7b3c

## Revision 10.5.2.1

### *New Features/Enhancements in 10.5.2.1*

- Intellifi® Mesh WiFi
  - Zero-touch provisioning of satellites by hub
  - Config synchronization from hub to satellites
  - Auto-generate network topology map
  - Aggregation of network/wireless stats from satellites to hub
  - Firmware management of satellites by hub
  - Auto-discover topology of PL60/MC60
  - Automatic updates (upon request)
- SR900ac POTS v1.0
  - Metaswitch SIP interoperability
  - Advanced telephony feature configuration
  - Call trace
  - TR-104
  - Interop may be needed
- VDSL2/ADSL2+ (Alpha-stage, software available upon request)

### *Fixes in 10.5.2.1*

Ref ID	Description
OWRT-2773	Prevent websocket timeout when webUI user is idle
OWRT-2827	Report current network status of LAN devices
OWRT-1483	WebUI glitches in Access Schedules page
OWRT-2419	WebUI crash following series of quick clicks
OWRT-2691	More accurate webUI progress bars for Reboot, Restore Factory, and Upgrade operations
OWRT-2614	Configuration of DHCP Static Associations in webUI
OWRT-2350	Incomplete 2.4GHz WiFi scan at boot
OWRT-2534	Unable to save Backup Config
OWRT-2030	Stun configuration migration when upgrading from SmartOS 10.3
OWRT-2009	Always disable stund when TR-069 is disabled
OWRT-2384	SR400ac multicast delivery issues with mix of wired and WiFi STBs
OWRT-2278	Correct lower-case MAC in manufacturing data on old hardware
OWRT-2321	Basic Setup page alignment issues
OWRT-2401	Correctly handle 32-character SSID
OWRT-1973	Port forward config not saved when changing port range to port

Ref ID	Description
OWRT-2405	Incorrect uses count on dashboard due to inclusion of inactive LAN hosts
OWRT-2795	Fix edit button on Hosts page
OWRT-1625	ACS erroneously reports duplicate Port Mapping objects
OWRT-2842	Clear Log button not functional in webUI
OWRT-2264	Javascript error on Network->LAN->Devices page
OWRT-2438	Display glitches in WiFi Performance pages
OWRT-2477	Inadequate firmware Image validation for TR-069 upgrade
OWRT-2247	Inadequate firmware image validation for webUI
OWRT-2234	APPLY banner does not appear following enable of Network Protection
OWRT-1794	Duplicate error message following attempted configuration of invalid LAN address
OWRT-2446	Fixed race condition in webUI backend when committing large set of changes

### Changes in 10.5.2.1

- WebUI updated look and feel
- WiFi SSID configuration moved from Radio interface page to Wireless Networks page
- Added HTTP proxy
- Added 5G Guest WiFi for SR900ac
- Added display of optic stats on SR900ac

### Known Issues/Limitations in 10.5.2.1

- DSL does not yet support ATM encapsulation (DSL only turned on in custom CDT)

### Release Image for 10.5.2.1

SR400ac:

- Filename: SmartOS-SR400ac-v10.5.2.1.img
- md5sum: f29e68d90f4341810b4c8d5f7c0433d5

SR900ac:

- Filename: SmartOS-SR900ac-v10.5.2.1.img
- md5sum: cf5eb350880b78294c938eb4888cc74b

## Revision 10.4

### *New Features/Enhancements in 10.4*

- WiFi
  - Support for Access Point mode
  - Monitor QBSS Load of adjacent Access Points
  - Advanced Airtime/Performance Monitoring
  - Advanced Airtime Client Performance
  - Support for USB LTE WAN
  - LTE Failover with per-host filtering
- Networking
  - IPv6: Dual Stack
  - Expanded Guest LAN Config options
  - DHCP Option 60 Vendor Class Identifier
- WebUI
  - Challenge Authentication
  - Internationalization: Support for Spanish, French, and German, switchable on the fly
  - Updated Dashboard and improved menu layout
  - Add/Delete webUI pages dynamically based on device state
  - Redesigned Firewall pages to protect users from common mistakes
  - Password recovery help to login page upon login fail
  - Optional auto-logout on inactivity
  - Notification if booted into MFG mode
  - Improved responsiveness for mobile clients
  - Support wired Ethernet hosts in dashboard and top talkers
- Management
  - New CWMP Client and rewritten TR181 DM
  - Expanded data model
  - Axiros and Incognito Interop
  - Add router aliases `http://setup` and `http://router`
- Manufacturing
  - Enter MFG mode through button hold sequence
- Network Security
  - Whole Home Ad and Malware Blocking

### *Fixes in 10.4*

Ref ID	Description
OWRT-601	Allowed cancellation of firmware image upload in webUI.
OWRT-1201	Improved validation of user input on SNMP config page.
OWRT-1565	Added Lost Password message/help on webUI login page after authentication failure.
OWRT-1603	Added display of STUN server configuration in webUI.
OWRT-1663	Added Challenge Response Authentication for webUI clients.
OWRT-1710	Prevented persistence of MAC in config when restored to another device.
OWRT-1724	Disallowed addition of duplicate firewall rules.

Ref ID	Description
OWRT-1769	Prevented duplicate confirmation dialogs on webUI Router Access page.
OWRT-1817	Addressed connectivity issue following addition of firewall rules.
OWRT-1913	Addressed alignment of Upgrade button on webUI firmware updates page.
OWRT-1929	Improved image validation message and functionality on upgrade page.
OWRT-1935	Corrected Retry rate calculations to prevent greater than 100% results within GUI statistics.
OWRT-1939	Added max and min limits to VLAN and P-bit fields in Internet WAN and Video WAN pages.
OWRT-1942	Addressed issue on tagged WANs where WAN interface name was not updated consistently across UI.
OWRT-1947	Addressed issues with the Device and Station counters reporting inconsistently.
OWRT-1953	Updated to latest dnsmasq to patch vulnerability.
OWRT-1956	Addressed issue regarding SSID reporting that occurs when changing radio bands.
OWRT-1982	Added Forgot My Password link to Login page.
OWRT-1991	Expanded IPv6 addresses in tables throughout UI.
OWRT-2000	Set auto-logout to optional.
OWRT-2023	Added guest wireless DHCP server settings to UI.
OWRT-2050	Improved top talker functionality on Dashboard.
OWRT-2111	Reduced tiling in video when there is contention in the switch.
OWRT-2132	Reported friendly device name to SHA.
OWRT-2134	Allowed AP mode to be set in Wi-Fi.
OWRT-2153	Prevented Wi-Fi config corruption on power loss during boot.
OWRT-2161	Allowed setting AP mode in web UI QuickStart (to match feature in Wi-Fi QuickStart).
OWRT-2174	Enhanced LAN-LAN throughput performance by allowing user to disable Port Isolation.
OWRT-2194	Set Guest Wireless Enabled toggle to Off when the respective wireless radio is disabled.
OWRT-2211	Addressed issue with SHA not responding to the SR400ac with proper data.
OWRT-2225	Addressed metacharacter handling issue within the router which caused admin and support passwords to be defaulted.
OWRT-2228	Disallowed config of Video port when Port Isolation is disabled.
OWRT-2230	Addressed issue with errors when stopping or restarting processes.
OWRT-2260	Advertise supported WiFi security modes in TR181.
OWRT-2279	Addressed issue with migration from older FW which impacted ACS interop.
OWRT-2296	Changed SHA client to report device ID as base MAC, rather than serial number.

### *Known Issues in 10.4*

None.

### *Release Image for 10.4*

- Filename: SmartOS-SR400ac-v10.4.7.1.img
- md5sum: 2d15e681103dfd07f0bd5af4fbd881d8



## Revision 10.3

### *New Features/Enhancements in 10.3*

- WiFi
  - Guest Network
  - Access Point Scan
  - HT40 with OBSS
  - Auto-channel selection
  - Connected Client List
  
- Parental Controls
  - Content Filtering via OpenDNS Family Shield
  - Time Blocking (per-device and per-group via Access Schedule)
  - Manual pause of device and device-group
  
- Media
  - Network File Sharing
  - DLNA
  - Cloud Storage Integration (box.com)
  
- Management
  - Provision ACS URL via DHCP Option 43
  - SmartRG Home Analytics (SHA)
  - Display STUN client config
  - Dynamic DNS
  - DHCP Clients
  - MAC Cloning
  
- Performance
  - Real-time performance graphs
  - Dashboard
  - QoS options for gaming and Netflix
  - Per-Port Egress Rate Limiting
  
- IPTV
  - Support for IPTV modes: untagged/tagged/dqtagged WAN + untagged/tagged Video
  - Video Analyzer
  - IGMP Group Memberships
  
- Other
  - Static Hosts
  - UK WiFi Support
  - Custom WebUI via Custom Defaults and Themes (CDT)

### Changes in 10.3

- The LAN MAC is Base-MAC + 1  
 Ex: If Base-MAC = 3C:90:66:00:12:80, then LAN MAC is 3C:90:66:00:12:81.
- The default password for the “support” user is the last 3 octets of the base MAC, with separating colons, all caps.  
 Ex: If Base-MAC = 3C:90:66:00:1A:80, then “support” password = 00:1A:80.

### Fixes in 10.3

Ref ID	Description
OWRT-541	SR400ac incorrectly reporting up time
OWRT-567	Set default hostname to SR400+<last-4-digits-of-base-mac>
OWRT-587	Addressed issue where remote http authentication was inoperative after “support” account password updated with special ascii characters (via TR-069)

### Known Issues/Limitations in 10.3

- IPv6 is disabled in this release

### Release Image for 10.3

- Filename: SmartOS-sr400ac-v10.3.8.1.img
- md5sum: 9465f83c9b04ac66df794b3cf11a5334

## Upgrade Notes

Upgrading from 10.2.X releases:

- In the Web UI, navigate to **System -> Backup/Flash Firmware** to perform upgrade.

Upgrading from 10.3.X pre-releases:

- In the Web UI, navigate to **ADMIN -> Update** to perform upgrade.
- After uploading file, select **Reset All Configuration** and click **Upgrade**.

### *Verify*

1. After the device reboots (~5 minutes), press the F5 key to refresh your browser and reconnect to <http://192.168.1.1/>.
2. Log back into the device.
3. Verify the version information in the **Software Version** field.

## Technical Support

### *CPE Issues*

Submit a ticket using our Customer Portal at <https://smartrg.atlassian.net>.

### *RMA's*

Follow the instructions in the [RMA Procedure document](#) (found in the Customer Portal).

### *Firmware*

Login to the [Customer Portal](#) to download firmware. If you are upgrading through multiple releases, follow the instructions in the Migration Best Practices document for your model.

### *Additional Contact Info*

Phone: +1 360 859 1780, Option 4

Hours: 5am -5pm PST (UTC-0800)

Email: [support@smartrg.com](mailto:support@smartrg.com)

## Document History

VERSION	DATE	AUTHOR	DESCRIPTION
1.0	12/30/14	Adam Fox	Document Creation
1.1	6/30/16	Adam Fox	Update for SmartOS 10.2.1.1.
1.2	6/30/17	Adam Fox	Update for SmartOS 10.3.8.1.
1.3	3/5/18	Adam Fox Kurt Diekemper	Update for SmartOS 10.4.
1.4	6/29/18	Adam Fox Kurt Diekemper	Update for SmartOS 10.5.
1.5	8/30/18	Adam Fox Kurt Diekemper	Update for SmartOS 10.5.4.1.
1.6	11/29/18	Adam Fox Kurt Diekemper	Update for SmartOS 10.6.x.
1.7	03/15/19	Adam Fox Kurt Diekemper	Update for SmartOS 10.6.61.
1.8	06/28/19	Adam Fox Kurt Diekemper	Update for SmartOS 10.7.1.1.
1.9	01/30/20	Adam Fox Kurt Diekemper	Updated for SmartOS 10.8.3.1.
2.0	3/31/20	Kurt Diekemper	Updated for SmartOS 10.8.4.1