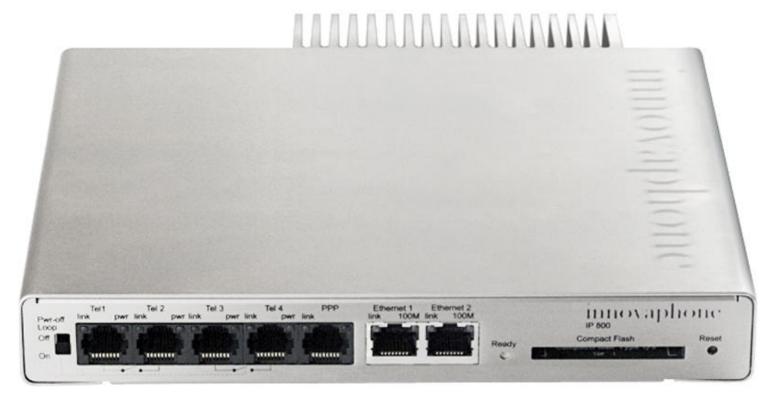


Meru Networks Interop Note Innovaphone PBX

Device Tested: Innovaphone IP800



Model Tested: Innovaphone IP800

Software Versions: 8.00 hotfix9 IP800 (H.323 Innovaphone HW IP800)

Innovaphone AG is a leading provider of IP telephony for business customers These include the innovaphone IP PBX and various VoIP gateways, standard conform IP telephones and IP adapters, which can be integrated seamlessly into heterogeneous company structures as a solution for a multi-site telephone system or as a hosted PBX.

This interop note describes the scope of the tests that have been conducted for interoperability purposes with the Innovaphone PBX IP800 and describes several test cases that were performed recently at Meru Networks.

Test Environment:

The testing for the interoperability of the Innovaphone PBX has been conducted with Ascom i62 phones using H323 protocol. The tests were undergone in Wi-Fi network environment. The following APs and controllers were used for interop testing

4 – AP320

1 - MC5000

System Director: 4.0-150 (MR3)

Virtual Port enabled

UAPSD Enabled on ESS and Phones





Testing Scope and Assumptions:

The testing for interoperability of the Innovaphone PBX IP800 with Meru Networks infrastructure has got limited scope. This has been performed using the Ascom i62 phone as a Wireless Network device operating with the Meru Networks infrastructure. Any other associated devices (backend analog PSTN gateways/switches) with the Innovaphone PBX have not been tested. It is assumed that there are no known network issues with the backend components required for PBX functionality.

Configuring Ascom i62 Phones:

Configuring the wireless phones is beyond the scope of this document. Please refer to the Ascom i62 Configuration Guide for more details on the same.

Configuring Innovaphone PBX:

The Innovaphone PBX operated out of the box as pre configured and sent out by Innovaphone support. The configuration of Innovaphone PBX is out of the scope of this document. Please contact Innovaphone support for any configuration issues.

Configuring Meru Wireless Infrastructure:

Configuring the Meru wireless infrastructure for the phones is beyond the scope of this document. Please refer to the System Director Configuration guide for more details.

Test Cases:

There were a few test cases that were executed to test the Interop functionality of the Ascom i62s with Meru Networks infrastructure. All these test cases were successfully completed both on "a"-band and "b/g" band using the Ascom i62 Phones.

Test 1: Stationary phones - power up and phone registration with Innovaphone PBX.

This test was performed using the following security profiles: Clear, WPA-PSK and WPA2-PSK. Any other security settings outside of these profiles were not performed.

Results: The stationary Ascom i62 was able to power up; they were able to register into the Innovaphone PBX using H323 protocol with no difficulty for all security profiles.

Test 2: Stationary phones voice call – making and receiving H323 based Voice Calls

This test was performed using the following security profiles: Clear, WPA-PSK and WPA2-PSK. Any other security settings outside of these profiles were not performed.

Results: The Ascom i62s were able to perform voice calls between themselves using the H323 protocol provided by the Innovaphone PBX. The voice calls were of high quality (with respect to human ears). The voice calls were able to stay on for prolonged period of time without any issues and adverse affect on the network.





Test 3: Voice roaming using Virtual Port

This test was performed using the following security profiles: Clear, WPA-PSK and WPA2-PSK. Any other security settings outside of these profiles were not performed.

Results:

The Ascom i62s were able to perform voice calls while roaming across multiple Access Points in the same Virtual Port using the H323 protocol provided by the Innovaphone PBX. The voice calls were of high quality (with respect to human ears). The phones were able to stay on call while roaming across multiple Access Points without the calls being dropped.

Report and Recommendation:

Innovaphone PBX – IP800 has been tested for successful Interoperability in Meru Networks Infrastructure under certain assumptions using the H323 protocol. With these assumption and test setup, the performance of the phones using the PBX has been found to be acceptable. Any other combination outside of the fore mentioned settings has not been tested and cannot be guaranteed by Meru Interop team.

In addition to the testing of Innovaphone PBX – IP800, the Meru networks Interop team has also tested Ascom VOIP gateway IGWP – which is an OEM version of the Innovaphone PBX. The software version that has been used for this testing is 7.00 with hotfix 25. The SIP protocol was used for this testing. Multiple testing has been done with this version of the SW. The Meru System Director version that has been used in this testing is 4.0-150 as well. Different types of testing for this version included association/authentication/registration, scale of phones, roaming and battery life. Results on all tests passed.

Meru Interop team does not expect to see any issues with the Innovaphone SW version 8.00 hotfix9. Meru would also recommend the usage of version 7.00 with hotfix25.

Please use the configuration note provided by the Meru Interop team to help configure the Meru infrastructure optimal settings for Ascom i62

For More Information

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