



## 1600 Series IP Telephones - one-X Deskphone Value Edition

**Description:** Clarifying PC data throughput using the 1608 10/100 switched Ethernet port.

Avaya's newest line of IP Phones, the 1600 series, also referred to as the Avaya one-X Value Edition Phones, compliments the more fully featured 9600 line by addressing the enterprises who require a quality telephone without the extras included higher end phones such as color, wide band audio and application enablement to name a few. In areas such as audio, security and in data throughput the 1600s meet customer expectations and perform well for common office use.

We have encountered some customers with expectations of data throughput based on the industry name (i.e.; a 10/100 MB port) for the interface rather than capabilities related to the price paid for the device. A device that supports an "Ethernet 10/100 line interface" (a 10/100 capable device) refers to the ability to connect to the 10/100 protocol and communicate on 10/100 networks. **This does not refer to the speed of which it can communicate – the actual throughput.** Many Avaya and competitor phone models have 10/100 interfaces, but this does not guarantee the device on average can pass through data at full interface occupancy (full "line speed") of 100mbits/second.

The 10/100 interface allows for expected forward rates for voice and data users, however 10/100 refers to the advertised interface connection, and for no device is a guarantee of actual throughput.

Just as a comparison of the ability of Ethernet switches in IP Phones of differing prices to forward traffic from the desk top (mixed voice and PC data packets) to the LAN (and visa versa), you can find relative differing capabilities for various data switches in the "wiring closet". Switches suited for high traffic core Enterprises and Service providers are typically offered at 2 to 3 times the per-port prices then counterparts targeting the "SMB", Enterprise Branch, or Industrial environments. When comparing the forwarding rates of these switches you can see similar performance differentials in the 3 or 4 to 1 ratios with respect to their port capacities. Although the differences in IP Phone desktop performances likely will not demonstrate such stark differences, the same principles in choosing which device fits which environment apply.

Avaya's med-range 1616 and high-end phones (9600) support environments with high demanding data traffic processing. In a few isolated incidents, we've had a handful of customers experiencing throughput delays from the extra 10/100 port in the 1608 to a connected laptop or PC. Specifically, in scenarios of high data traffic volumes, but with small data packet sizes.

A patch release of firmware for the 1608 is now available to remedy this problem. With the patch, the performance of the 1608's average throughput rates improves to be comparable to 1616 and 9600 series performance. **Thus, with the new patch release - the 1608 is suitable for all**

Avaya Inc.

© 2008 Avaya Inc. All Rights Reserved. All trademarks identified by the ® or ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners.

**Everyday user cases. In extreme user cases**, (scenarios of high data traffic volumes, but with small data packet sizes) **the performance of the 1608 has average throughput rates merely 10-15% below that you would expect from a 1616 or a 9600 high-end phone / HW switch** (for an average user case running Everyday Profile applications).

Thus, when addressing data throughput for customers with data intensive environments including frequent file transfers or sharing of very large (e.g. multi- hundred MB) files, customers will find that compared to the 1608, that the 1616 is "better," and a 9600 is "best" and likely more suitable due to the increasingly higher end architectures, reflected in the higher list prices.

**The Product Support Notice (PSN) can be found [here](#); including a link to the patch.**

**Where to go for more information:**

*For additional information on the 1600 Series IP Deskphones, please refer to*

<https://portal.avaya.com/ptlWeb/products/P0468/AllCollateral>

**Channels:** Direct and Indirect

**Regions:** Global

**Contacts:**

Alon Waks, Product Manager, [WAKS@avaya.com](mailto:WAKS@avaya.com), 908-953-5528

Bill Riley, Marketing Manager, [rileyw@avaya.com](mailto:rileyw@avaya.com), 248-746-5209

Avaya Inc.

© 2008 Avaya Inc. All Rights Reserved. All trademarks identified by the ® or ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners.