



Nortel IP Phones Broadcast Storm Advisory - Update

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Background:

This is an update to a previously published Product Alert Advisory Bulletin (PAA-2005-0196-Global) which advised of a problem in some situations with connection of an IP Phone to a non-PoE (Power over Ethernet) network switch, without powering the phone with the local AC adapter, where this can cause broadcast storms.

Analysis:

Expected Scope:

Can occur with IP Phone models 2001, 2002, 2004, 2007 (NTDU90, NTDU91, NTUD92, NTDU96) and IP Phone models 1120E, 1140E, 1150E (NTYS03, NTYS05, NTYS06). The problem does not occur with IP Phone models NTDU76, NTDU82, NTEX00, nor the NTYS02.

The problem occurs because the unpowered phone contains a filter network placed between the receive and transmit Ethernet pairs. The filter network is present in the phone only when unpowered. The purpose of the filter network is to provide the unique signature required by legacy Cisco PoE switches to discover and distinguish devices that require network power.

Under some conditions the filter network can reflect broadcast data from the receive side to the transmit side. This can cause a broadcast storm to occur.

This problem does not occur if using a PoE switch to provide the power to the phone since the phone cannot be connected to the switch and unpowered at the same time.

The problem only occurs when the phone is not PoE powered, and the AC adapter is disconnected.

Recommendations:

The solution on non-PoE network switches is to enable Spanning Tree on the network switch. Spanning Tree detects and automatically shuts down ports in this condition.

Required Actions:

If you need to unplug the power from the IP Phone models 2001, 2002, 2004, 2007, 1120E, 1140E, and 1150E (NTDU90, NTDU91, NTDU92, NTDU96, NTYS03, NTYS05, and NTYS06), please make sure that you also unplug the Ethernet Cable first.

Nortel is committed to delivering quality products and services to our Channel and customers. As part of this process,

we routinely evaluate our products based on strict standards, often times exceeding what is commonly used in the industry. The intent of enabling these models of Nortel IP Phones to support legacy Cisco PoE, is to enable customers to achieve investment protection and to leverage existing equipment as appropriate.

Attachments:

There are no attachments for this bulletin

Products and Releases:

The information in this bulletin is intended to be used with the following products and associated releases:

PRODUCT	RELEASE
Phones & Accessories-IP-IP Phone 1120E	
Phones & Accessories-IP-IP Phone 1140E	
Phones & Accessories-IP-IP Phone 1150E	
Phones & Accessories-IP-IP Phone 2001	
Phones & Accessories-IP-IP Phone 2002	
Phones & Accessories-IP-IP Phone 2004	
Phones & Accessories-IP-IP Phone 2007	

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