

ref:	NR/L3/TEL/30181/002
Issue:	1
Date:	05 March 2016
Compliance date:	04 June 2016

Level 3

Work instruction

Thameslink Cisco layer 2/3 switches

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1 Scope

This module specifies the requirements for the maintenance of Thameslink Cisco layer 2/3 switches.

It is applicable to all staff carrying out maintenance work on Thameslink Cisco equipment.

2 Procedure

2.1 Preparation and installation work

NOTE: Where the configuration of a 'spare' switch is required as part of a maintenance activity this will require a DCN (dynamic circuit network) maintenance laptop, a USB or serial CISCO console cable, and an Ethernet cable.

2.1.1

Obtain a list of faults from the Network Management System, and check that the task to change a switch can be undertaken without effect on the pre-planned arrangements or any other pre existing faults.

2.1.2

Use rack digrams and labelling to identify the faulty switch. Carry out a correlation check to confirm equipment and cables match the wiring diagram.

2.1.3

Check that the replacement switch is of the correct type and not damaged. Pay special attention to IE3010 switches and IE2000 switches, which have two variants in use. Check the correct 'plug-in' modules are installed where applicable.

2.1.4

Record the serial number of the replacement switch.

2.1.5

Place the replacement switch on a bench along with the maintenance laptop. Apply power to the switch. Check the laptop's network adaptor local area connection IPv4 address is configured to be 10.255.0.2 and Subnet Mask 255.255.255.0 (Default Gateway not required).

2.1.6

Connect the appropriate CISCO console cable between the switch and the maintenance laptop (using a USB to serial adapter where appropriate).

2.1.7

Connect an Ethernet cable from the maintenance laptop to the last copper port on the switch (or to the rear mounted management port on a CISCO C3750X-12S-S switch).

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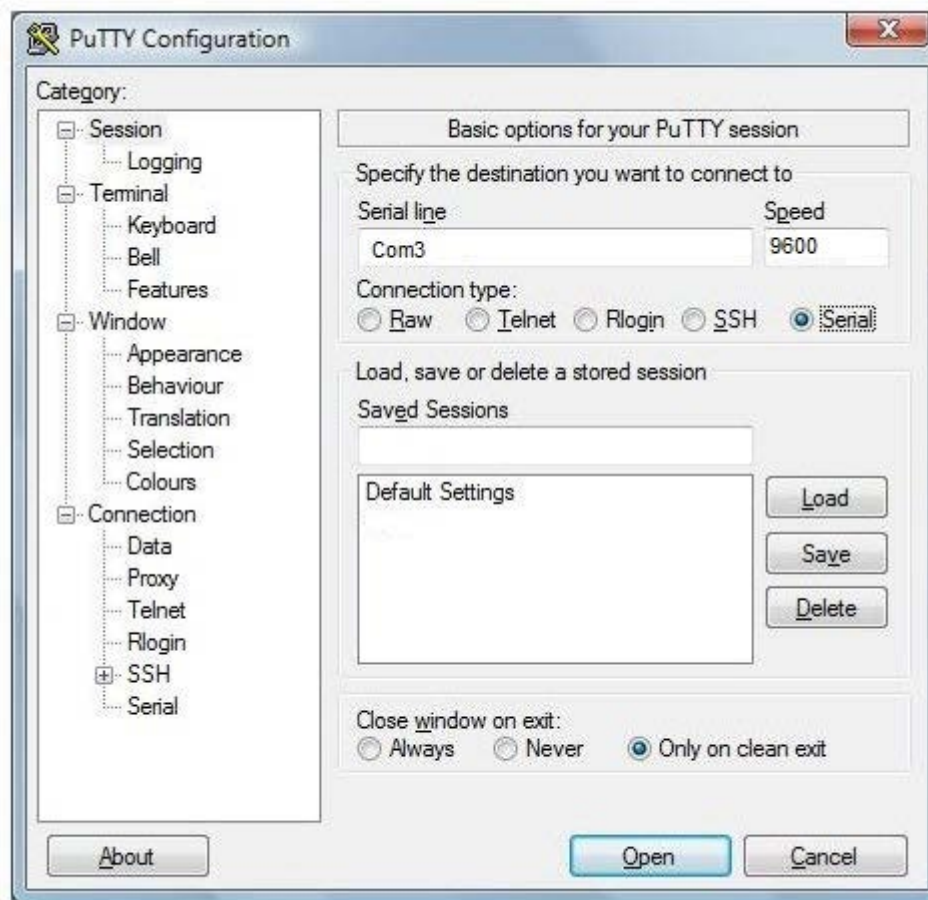


Figure 1 – PuTTY configuration

2.1.8

Using windows device manager confirm the COM port number of the serial port.

2.1.9

Using the PuTTY application as shown in Figure 1 on the maintenance laptop connect to the switch's serial port (COMX, speed 9600). A terminal window will appear.

2.1.10

The command prompt might ask 'Would you like to enter the initial configuration dialog? [yes/no]: '. Type 'no' and press enter. If this question does not appear the cursor will be present and proceed to the next step.