



European
University
Institute

INFORMATION
AND
COMMUNICATION
TECHNOLOGY
SERVICE

Annex G - Reference Guide for Installation and Trials

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1. Introduction

This document describes in detail what tests the apartment must pass for its performance to be approved.

These tests assess the experience that a tenant of the Institute's guest quarters will have. In particular, connections with Office 365, the European University Institute and Google are analysed. Set-up of the client to be used to perform the tests is the responsibility of the Company; any Windows device may be used that is able to run the software listed in this document.

Please note that the e-mail account: test.ICTSCFTPAB@eui.eu, and the server name: server1.eui.eu mentioned below serve purely as examples. These variables will be specified to the tenderers who participate in the site inspection.

2. Software to use

The software that must be used to assess the apartment's performance includes the following:

- *Microsoft Office 365 Client Performance Analyzer*
- *FTP transfer test from the EUI*
- *Connectivity test toward Google*
- *Connectivity test toward the EUI*

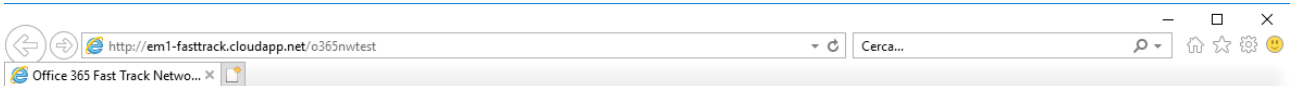
3. How to test Office 365

Connectivity with Office 365 will be verified using the appropriate tool from Microsoft.

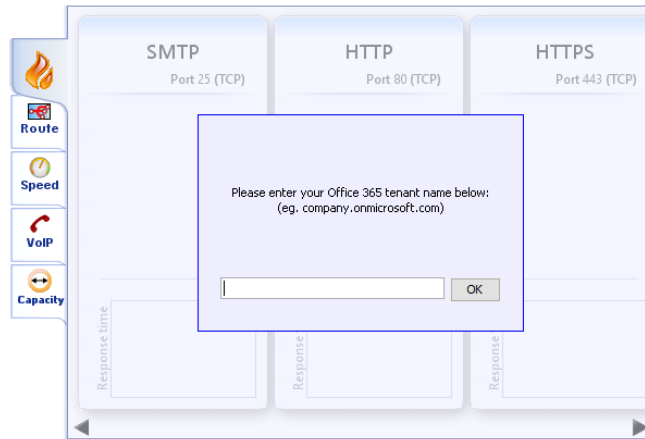
Open the following link <http://em1-fasttrack.cloudapp.net/o365nwtest>

In order to open the above web page, the laptop must be equipped with Internet Explorer and Java.

At this point use the account test.ICTSCFTPAB@eui.eu.



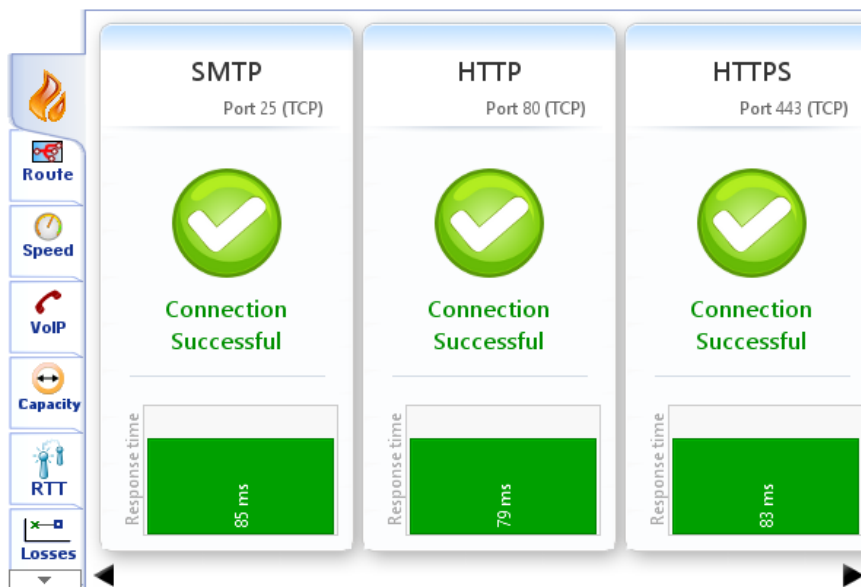
Fast Track Network Analysis (EMEA)



The test result should return some values like the ones listed below.

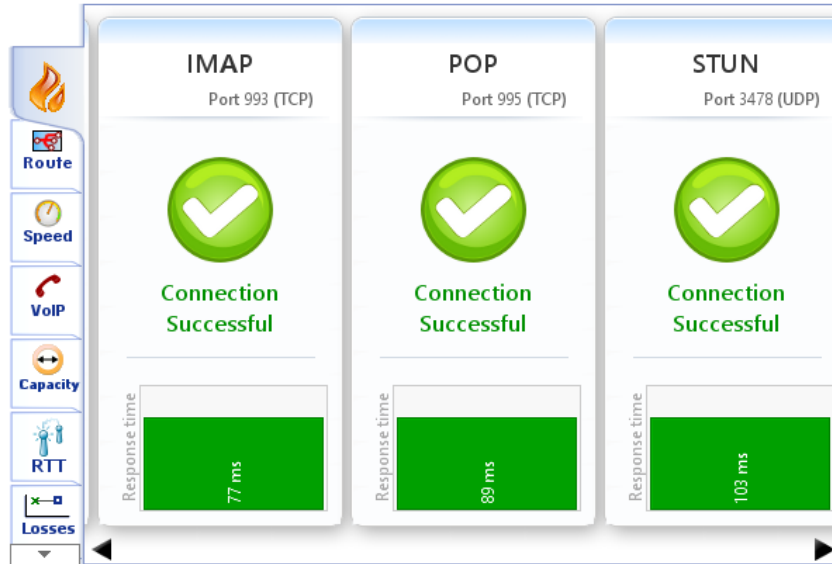


Fast Track Network Analysis (EMEA)

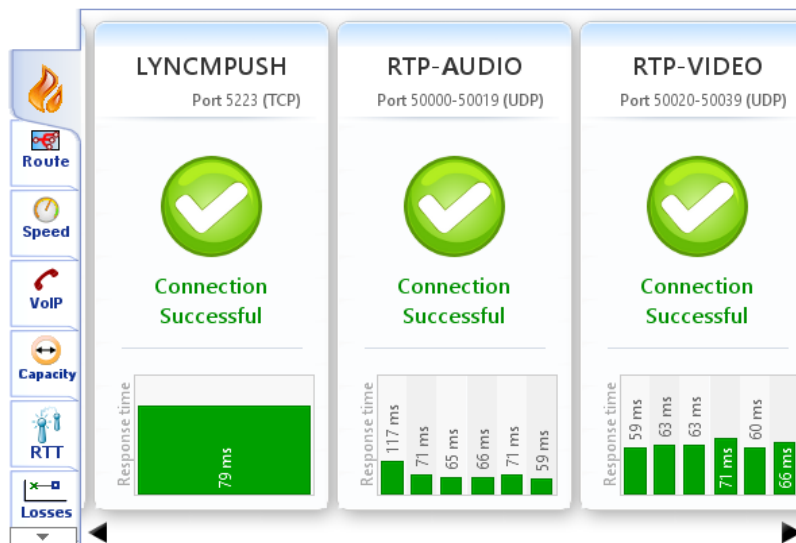




Fast Track Network Analysis (EMEA)

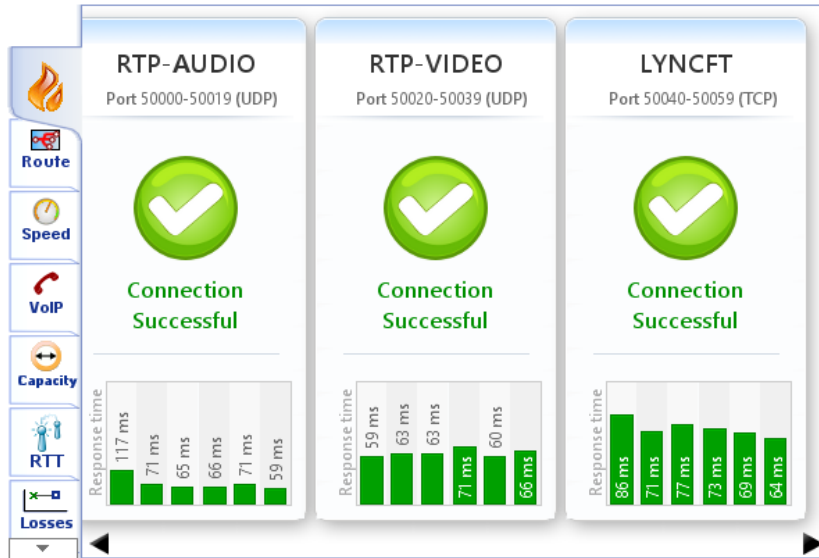


Fast Track Network Analysis (EMEA)

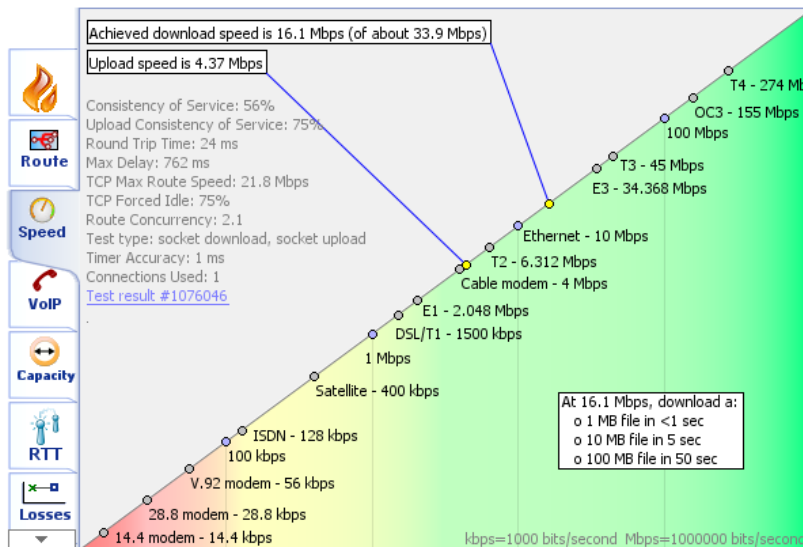




Fast Track Network Analysis (EMEA)



Fast Track Network Analysis (EMEA)



The Test Result #nnnn link will show a summary page like the below one:

MyConnection Server® NetworkCenter

Detail for Test #1076048






Summary

This report refers to a connection test carried out by IP address 5.171.16.236 on 21 Mar 2018 15:35:52 GMT+00:00.

D/load capacity	● 19712 Kbps
U/load capacity	● 3667 Kbps
D/load packets	● 2464 Pkts/s
U/load packets	● 458 Pkts/s
Packet size	● 1000 bytes
QOS	● 98 %
Test	O365 NW Test

[Analyze this test](#)


Connection Capacity Test


-  Capacity
-  Losses
-  Graph
-  Summary
-  Advanced


Connection Summary

[Test audit report](#)

Results analysis for: [capacity test](#)

 Your [download capacity](#) of 19.7 Mbps is acceptable.

 Your [upload capacity](#) of 3.66 Mbps is acceptable.

 Your [Quality of Service](#) was measured at 98%, which shows that your connection can produce a constant stream of data.

The results of the test must confirm that all the protocols are available and the download speed is enough to respect the minimum committed rate requirement (3 Mbit/s per apartment).

The tool which will be used is a third-party tool (Microsoft). Any changes or additions to the above reports (format or data) are not under the Institute's control. In case of significant changes, the Institute will prepare a new guide to complete the tests.

4. Carrying out an FTP Test towards the European University Institute

Launch the Command prompt and open an FTP session towards the European University Institute (Server.eui.eu).

An FTP transfer must be performed of a 512MB file already prepared by the Contracting Authority, following a procedure similar to the one shown below (the times and speeds shown in the procedure are not significant for the purposes of the tests that will be performed: the example was carried out in a laboratory with PCs wired into the same network):

```
C:\>ftp
ftp> open 192.168.93.66
Connected to 192.168.93.66.
220 ... FTP Server
User (192.168.1.1:(none)): FTPuser
331 User name ok, need password
Password:
230 User logged in
ftp> dir
200 PORT command successful.
150 File status OK; about to open data connection
drwxrwxrwx 1 owner group    0 Oct 11 14:55.
drwxrwxrwx 1 owner group    0 Oct 11 14:55.
-rwxrwxrwx 1 owner group 302890264 Apr 19 09:40 FILE1.bin
-rwxrwxrwx 1 owner group 1032794112 Nov 27 12:23 FILE2.avi
226 Closing data connection
ftp: 222 bytes received in 0.02Seconds 13.88Kbytes/sec.
ftp> get FILE1.bin
200 PORT command successful.
150 File status OK; about to open data connection
226 Closing data connection; File transfer successful.
ftp: 302890264 bytes received in 20.81Seconds 14554.33Kbytes/sec.
ftp> close
221 Service closing control connection
ftp>bye
C:\>
```


The details on the server, the Username and Password will be provided later.

The fields highlighted in bold: bytes received, time taken to transfer, and the speed in Kbytes/sec should be noted.

Considering the tender's minimum requirement of 3Mbps as bandwidth for each apartment, the time to transfer a 512Mb file should not exceed 26 minutes.

5. Google Test

Launch the Command prompt and run a weighted Ping (1024 bytes):

```
ping -l 1024 -n 1000 8.8.8.8
```

An average round-trip time of less than 50ms and a success rate higher than 99.9% should be achieved.

6. European University Institute Test

Launch the Command prompt and run a weighted Ping (1024 bytes):

```
ping -l 1024 -n 1000 Server1.eui.eu
```

where Server1 is hosted in the Institute network environment.

An average round-trip time of less than 50ms and a success rate higher than 99.9% should be achieved.

7. Test results

To avoid false positives, the Company will be able to make 3 (three) attempts for each individual test to try to successfully pass it.

The trial shall be deemed to have been successfully passed if the Office 365 test has given a positive result by displaying all the values in green, if the FTP test for the European University Institute has exceeded the expected average speed, and if the Google and the Institute test have provided the expected result.

A written report will be produced with the results of the trial countersigned by the Company's Service Supervisor and the Contract Reference Person for the Institute.