NX Access to the NSLS-II Controls Network

v.2.0, Robert Petkus

May 20, 2014 Update:
Our current gateway systems are in the process of being upgraded and are migrating to NX Server v.4.x, the version detailed in this document. Only box32-1 and box64-1 presently use this version of NX.

Notes
- This document supersedes earlier NX documentation for the group.

Background
The NSLS-II Controls Network is private (isolated from the BNL campus network) and is accessible via the following interactive gateway systems:
Box32-1.nsls2.bnl.gov (32-bit Debian 7)
Box32-2.nsls2.bnl.gov (32-bit Debian 6)
Box32-3.nsls2.bnl.gov (32-bit Debian 6)
Box64-1.nsls2.bnl.gov (64-bit Debian 7)
SSH and NX access are available on these systems from the campus network, BNL SSH gateways, and VPN. This document concerns NX, which is used to provide a remote virtual desktop environment.

NX Client Installation and Configuration

1) Download and install the latest NX client for your system (Windows, OS X, and Linux clients are available) from the NoMachine website:
https://www.nomachine.com/download

2) Launch the NoMachine NX client application and configure your first connection (subsequent connections follow the same procedure).
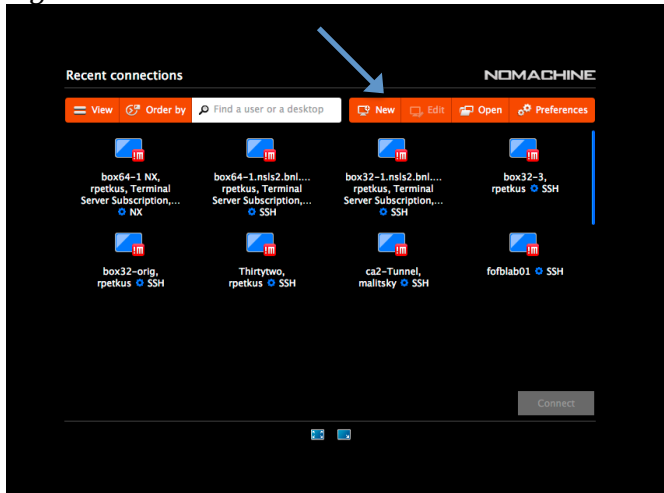
Figure 1: Select "New"
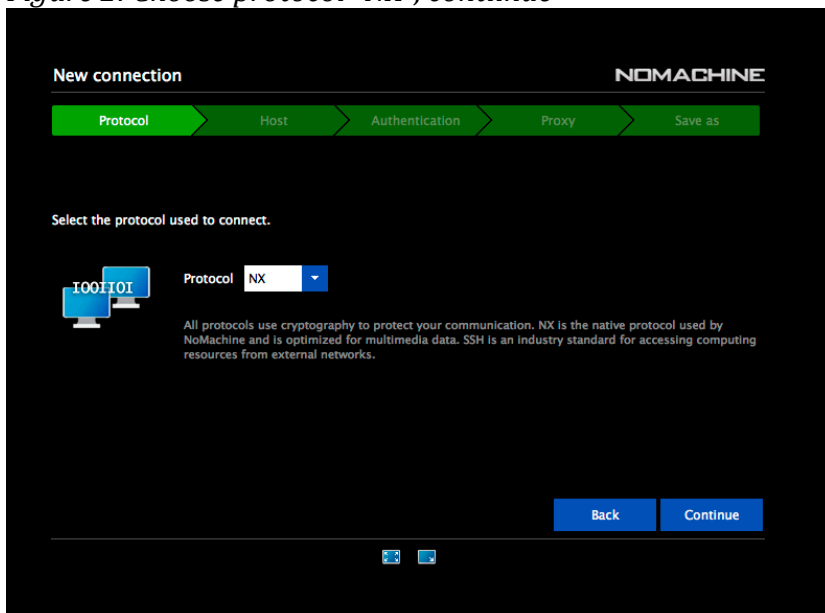

Figure 2: Choose protocol "NX", contiinue

Figure 3: Enter hostname, port 4000, continue

Figure 4: Authentication method "password", continue

Figure 5: No Proxy, continue

Figure 6: Name connection (a name of your choosing), Done
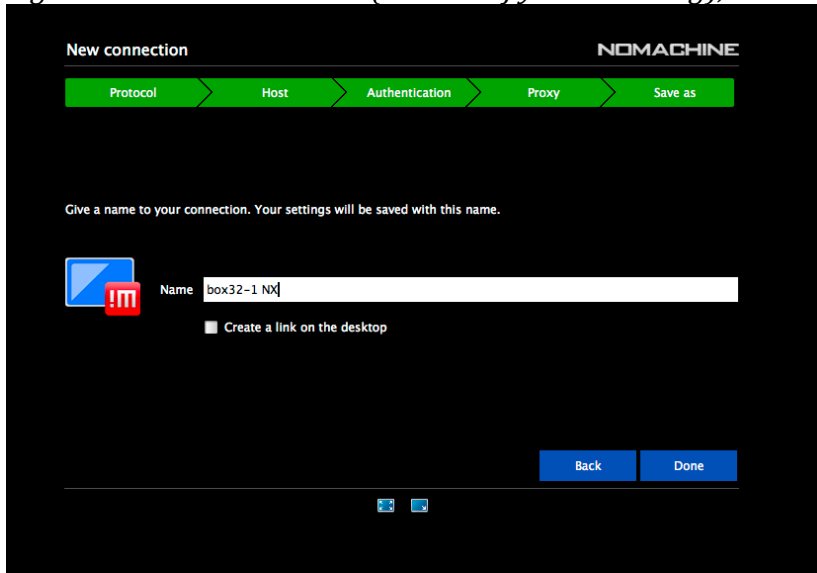
3) The NX client is now set-up for connection. Double-click on the newly created system icon (in our example, box32-1)
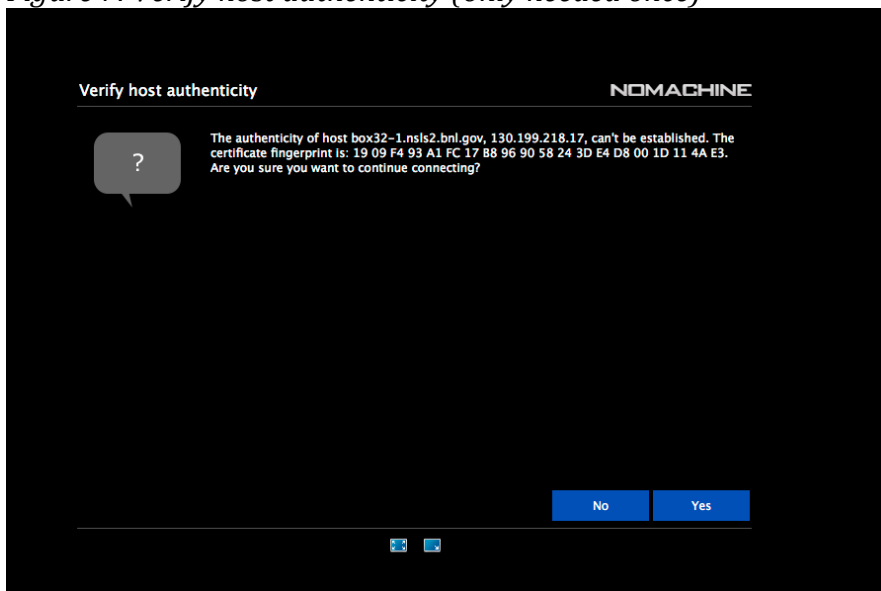
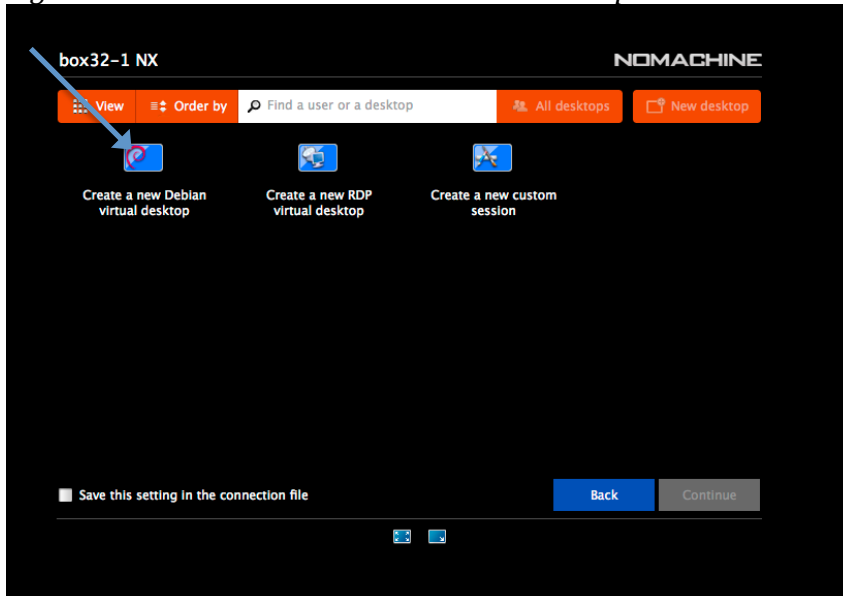*Figure 7: Verify host authenticity (only needed once)*

Figure 8: Enter LDAP credentials

Figure 9: Create a new virtual desktop

Figure 10: Create a new Debian virtual desktop Text

4) Adjusting the display. It may be the case that the entire workspace is not displayed properly; e.g., the edges are cut-off. The display can be re-rendered from the client.
Press control+alt+0
Select Display
Select "Fit to window" and/or "Resize remote screen"

Figure 11: Display preferences