These modification notes contain information relating to a maintenance release of Netop Remote Control 12.20 including the ActiveX Guest (nguestx.ocx). Where applicable, the affected support case reference numbers are displayed below.

As a maintenance release, version 12.21 is free for customers who already have a valid version 12.20 license. To read more about what’s new in Netop Remote Control 12.20, please refer to the Release Notes at www.netop.com

If you have questions about your license or wish to purchase an upgrade to Netop Remote Control 12.20, please contact Netop Customer Service or your local Netop Partner for more information.

Multi-monitor Support

The 12.21 release includes new capabilities for selecting and viewing multiple monitors attached to a remote device. Authorized Guest users have the ability to select from:

- All monitors
- Primary monitor
- A specific monitor

A multi-monitor icon has been added to the remote control session toolbar.

By clicking on the multi-monitor icon, the Guest user has the ability to change their multi-monitor settings.
Windows Guest users can specify their preferred option before beginning a remote session by modifying the **Connection Properties > Startup** menu. The preferred option can also be saved within a Phonebook file.

Multi-monitor options have also been added to the browser based support console available through the Netop Portal. A new icon is available during a browser based support session allowing the remote user to select one of the available multi-monitor settings.

**New name for WebConnect 2 communication profile**

The WebConnect 2 communication profile has been renamed – Netop Portal. All references within the Guest and Host communication profile settings now reflect the new name.
With the February 22, 2016 release, a variety of new features and capabilities have been added to the Netop Portal.

**Left side menu**
An expanded left side menu has been implemented for easy navigation. The menu can be collapsed to provide additional screen space.

**Getting started**
The GETTING STARTED page of the portal is now available by clicking on the dashboard icon from the left menu. From the GETTING STARTED page, new video tutorials have been included to assist users.
Filtering
Lists presented within the USERS, DEVICES, ROLES and ROLE ASSIGNMENTS pages can now be filtered from within each column. Users can apply multiple filters concurrently.

![Filtering Screenshot](image)

Devices
Management functions for devices have been separated from access functions. Adding devices to groups and editing device properties is available through the DEVICES page.

![Devices Screenshot](image)
Access to devices – through the browser based support console – is achieved by clicking the Connect button available from the MY DEVICES page.

Lists presented in both the DEVICES and MY DEVICES pages include a new icon within the Host column that identifies the operating system of the device.

Roles
Roles have now been implemented in the Netop Portal. Roles are a set of permissions which can be applied to a group of users through Role Assignments. With the February 22nd launch, a total of seven (7) Roles are available.

Users with administrator level access to the Portal have access to the ROLES page. The ROLES page provides a listing of the available Roles, their type, name and a short description.
Two (2) Role types have been implemented, each representing a specific set of permissions.

The Enroll type is limited to registering or unregistering devices within the Portal. Only users who have been assigned an Enroll role type have the ability to enroll devices in the Netop Portal with their Portal username and Portal password.

The Device role type includes a set of permissions related to remote control sessions. By clicking on the name of a specific role from the ROLES page, the user is provided information about the role and the full list of associated permissions.
Role assignments

The permissions defined by roles are applied to users and devices through role assignments. A role assignment is comprised of a role, a group of users (Supporters), and a group of devices. User groups (also known as Supporter Groups) and device groups must be created before adding new role assignments.

In order for a role assignment to govern the permissions of a remote user, the Netop Host’s Guest Access Security settings must be configured to **Use Netop Portal access rights**.

Security updates

Guest Access Security

A new **Guest Access Method** is available from the **Guest Access Security** settings of the Netop Host. This new setting takes advantage of the Groups, Roles and Role Assignment capabilities now found in the Netop Portal. When the **Guest Access Method** is set to **Use Netop Portal access rights**, the role assignments defined within the associated Netop Portal account will govern the permissions available to the remote user.
WebConnect Security Improvements
A variety of improvements have been implemented to increase the security of communication when using a WebConnect communication profile. These improvements include:

- The autocomplete option within HTML forms has been turned off to prevent browsers from storing sensitive credential information
- Additional SSL cookies now have secure flags set to prevent the interception of unencrypted HTTP traffic
- For connections using the Linux Guest & Host, we have improved how SSL certificates are used and validated
- Forms used within the web interface of the Connection Manager are now protected with random access tokens

In order to take advantage of the WebConnect Security Improvements, customers must upgrade their Connection Manager, Guest and Host licenses to version 12.21.

Once the Connection Manager has been updated to version 12.21, Guest and Host versions prior to 12.21 will no longer connect successfully through the Connection Manager.

Stronger hashing
With version 12.20, stronger password hashing was implemented for locally stored passwords. With version 12.21, stronger password hashing has been implemented for passwords used in conjunction with Netop Security Server.

New command line parameters

When running the Windows Host, new command line parameters can be used to change the status of the Host. This implementation mimics the start, stop, and restart buttons in the Host GUI interface and includes the option of including the Host maintenance password

- /START
- /STOP
- /RESTART
- /MPASS (maintenance password)

Additional command line parameters are available to change the access rights a Guest has on the Host without disconnecting the user. After access rights have been set, prior access permissions are overridden for all sessions (running or future), no matter how the Guest accesses the Host.

Multiple permissions can be set by using the /SETPERM flag as many times as necessary. The /RESETPERM flag can be used to revert to the intrinsic value for a permission (or for clearing all overrides).

- /SETPERM
- /RESETPERM

Nowutil.exe can be used to issue these commands. [/H ] is used if the commands are sent through nowutil (e.g., /H /START).
Defects resolved

- Windows Guest get inventory fails after file transfer
  Support case ref: 00100478

- Windows Guest not using correct netop.ini settings when copied to removable media
  Support case ref: 00101229

- Windows authentication through Security Server does not work from non-Windows Guests

- Linux Host keeps restarting with invalid Security Server key or address

- Windows Guest error when trying to create new RDP entry in phonebook

- Windows Guest crashes when scrolling the phonebook
  Support case ref: 00102802

- Pack ‘n’ Deploy trial license key is included in the property list
  Support case ref: 00102935

- Windows Host uses high CPU on Windows 7
  Support case ref: 00103654

- Linux Host error indicating there is no space left on device
  Support case ref: 00104755