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DOCUMENT NAME	*DATAPIPE SANTA USER GUIDE*

DATAPIPE CLASSIFICATION LEVEL - INTERNAL

REVISION LEVEL	6
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REVISION LEVEL	HISTORY	REVISION DATE
1	Initial Release	January 27th, 2016
2	Added DR section Added Feedback section Added section 2.5	February 5th, 2016
3	A. Edited Purpose and Scope section 1. Added Kansas City, MO subsection 2. Edited San Jose, CA subsection: Removed RDGateway Address line and added SANTA Home Directory & Access to Kansas City, MO lines) 3. Edited Somerset, NJ subsection: Removed RDGateway Address line and added SANTA Home Directory & Access to Kansas City, MO lines) 4. Edited note within Purpose and scope section (right under the MCI details addition) B. Edited Manage Windows Resources(Section 2) 1. deleted third bullet ("The local Remote Desktop Client") 2. Added 2.1.D C. Added section 2.2.I D. Edited Section 2.3: added 'How to Transfer files' E. Edited section 2.4: Replace 'The Local Remote Desktop Client' with 'How to access MCI Resources via SMQ & SJC F. Edited section 2.5 Replaced 'Full Desktop via RDP client' with 'How to access SMQ Resources from MCI G. Added sections 3.4-3.7 H. Added section 4 'Secret Server Integration' **All subsequent sections shifted** I. Added line "MCI-> SMQ" to Disaster Recovery (section 6.1) J. Added sections 7.3 and 7.4	March 1st, 2016
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5	Added Hong Kong Updated DR section with HKG to SJC failover Added London, UK SANTA network location Updated Responsible Parties section to reflect new party titles Updated DR section with HKG to LON failover, and vice versa	June 30th, 2016
6	Updated Purpose and Scope Added new section "Connection Information" Updated instructions and details to match latest procedure Added new section "FAQ"	January 9th 2017

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INTRODUCTION

PURPOSE AND SCOPE

The Secure Access Network for Transparent Administration (SANTA) is a PCI-compliant management network leveraged by all Datapipe employees with a business need to manage client system components.

The SANTA network has been deployed to every Datapipe region with a sizeable support presence. This includes Somerset, NJ, San Jose, CA, Kansas City, MO, Hong Kong, CN, and London, UK. The SANTA network leverages Windows and UNIX jump hosts all tied directly into the Datapipe domain. The network is completely isolated so it can't be accessed by any computer or network unless a two factor SSL VPN connection is established. As long as the SSL VPN prerequisite is available, the SANTA network will be accessible to authorized employees from both inside and outside the Datapipe network.

The network incorporates various remote access mechanisms to ensure employees can choose how they managed client resources from the SANTA environment. For example, employees who primarily manage Windows workloads, RemoteApp functionality similar to Citrix as well as terminal server desktops are available. In addition, for those that commonly manage UNIX workloads, SSH jump hosts and/or graphical desktop functionality is also available.

RELATED DOCUMENTS

NA	NA

TERMS AND DEFINITIONS

NA	NA

RESPONSIBLE PARTIES

DIS	Director of Information Security
SEC ENG	Security Engineer(s)

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1 CONNECTION INFORMATION

Below you will find SANTA connection information to be used when leveraging some of the functionality within the environment.

- **Somerset, NJ**
  VPN Host Address: access-dpmgmt-smq.datapipe.net
  RemoteApp (RDWeb): https://rds-dpmgmt-smq.datapipe.net/rdweb
  RemoteApp Web Feed: https://rds-dpmgmt-smq.datapipe.net/RDWeb/Feed/webfeed.aspx
  SSH VIP: unix-dpmgmt-smq.datapipe.net
- **San Jose, CA**
  VPN Host Address: access-dpmgmt-sjc.datapipe.net
  RemoteApp (RDWeb): https://rds-dpmgmt-sjc.datapipe.net/rdweb
  RemoteApp Web Feed: https://rds-dpmgmt-sjc.datapipe.net/RDWeb/Feed/webfeed.aspx
  SSH VIP: unix-dpmgmt-sjc.datapipe.net
- **Kansas City, MO**
  VPN Address: access-dpmgmt-mci.datapipe.net
  RemoteApp (RDWeb): https://rds-dpmgmt-mci.datapipe.net/rdweb
  RemoteApp Web Feed: https://rds-dpmgmt-mci.datapipe.net/RDWeb/Feed/webfeed.aspx
  SSH VIP: unix-dpmgmt-mci.datapipe.net
- **Hong Kong, CN**
  VPN Address: access-dpmgmt-hkg.datapipe.net
  RemoteApp (RDWeb): https://rds-dpmgmt-hkg.datapipe.net/rdweb
  RemoteApp Web Feed: https://rds-dpmgmt-hkg.datapipe.net/RDWeb/Feed/webfeed.aspx
  SSH VIP: unix-dpmgmt-hkg.datapipe.net
- **London, UK**
  VPN Address: access-dpmgmt-lon.datapipe.net
  RemoteApp (RDWeb): https://rds-dpmgmt-lon.datapipe.net/rdweb
  RemoteApp Web Feed: https://rds-dpmgmt-lon.datapipe.net/RDWeb/Feed/webfeed.aspx
  SSH VIP: unix-dpmgmt-lon.datapipe.net

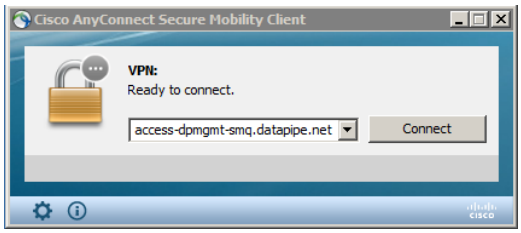
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2 CONNECT TO SSL VPN

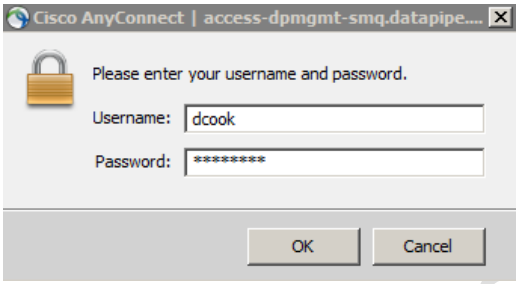
NOTE: To gain network connectivity to SANTA, you will need to establish a two-factor SSL VPN session. It is important that you connect to your closest SANTA network to ensure you receive the best experience.

A. Launch your Cisco AnyConnect Secure Mobility Client that can be located on your Citrix Desktop or Mac Mini. If your personal and/or employee owned computer doesn't have the client installed, please see section 2.1 below.

B. Input the VPN address based upon your desktop location. For this example we will be using SANTA in Somerset, NJ.



C. You will be prompted for your credentials. Input your active directory username as well as your Defender PIN + Token and click OK.



2.1 DOWNLOAD AND INSTALL THE CISCO VPN CLIENT

You may download and install the CISCO AnyConnect VPN Client on your personal and/or employee owned computer by doing the following.

A. Visiting the VPN Address for your respective office locations in a browser (e.g. https://access-dpmgmt-smq.datapipe.net)

B. Logging in with your Active Directory username and your Defender Token + PIN

C. Underneath Install module(s) below the listed sequence, Platforms supported Desktop, there will be a link labeled "AnyConnect VPN" click on that to start the download.

D. Follow the rest of the instructions to finish the installation.

E. A reboot should be performed if prompted.

F. Go back to Step 1 and connect.

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3 SANTA WINDOWS RESOURCES

If you would prefer to leverage the Windows resources of SANTA to manage client system components, there are several ways to do this.

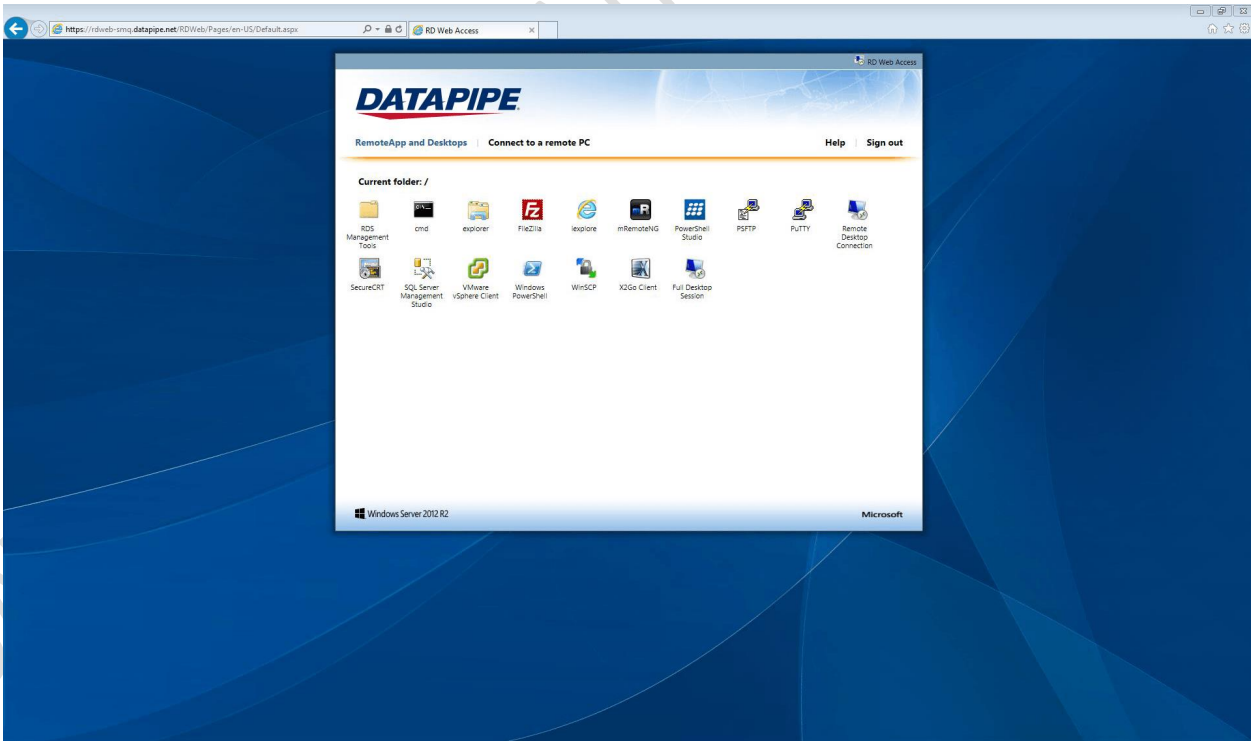
- The RemoteApp web site
- The RemoteApp control panel

3.1 REMOTEAPP WEBSITE

A. The RemoteApp web page contains a dynamic list of approved remote access applications that are typically used to manage Windows servers. The list of applications includes, but not limited to a RDP Client, Command Prompt, PowerShell, browser, etc. In addition, there is a RemoteApp called 'Terminal Server' that if launched, will provide you with a full Windows 2012 R2 desktop to use. NOTE: The RemoteApp web site is fully supported only on Internet Explorer. Other browsers can be used, but seamless RDP and SSO will not work. If another browser is used, when a RemoteApp is launched it will be downloaded, and can then be executed from your local file system. This is also helpful if you would like to save these pre-defined RemoteApp's to your desktop for convenience.

B. Since we will be using SANTA in Somerset, NJ for our example, please visit https://rds-dpmgmt-smq.datapipe.net/RDWeb/Pages/en-US/login.aspx from a browser. If you're coming from a Datapipe-corp domain joined computer and Internet Explorer you will automatically be logged into the RemoteApp web site via single sign-on.

C. From a computer that is not domain joined and/or using a non-supported browser, you will be presented with a Windows logon prompt to enter your active directory credentials. You will need to put datapipe-corp\ in front of your username.



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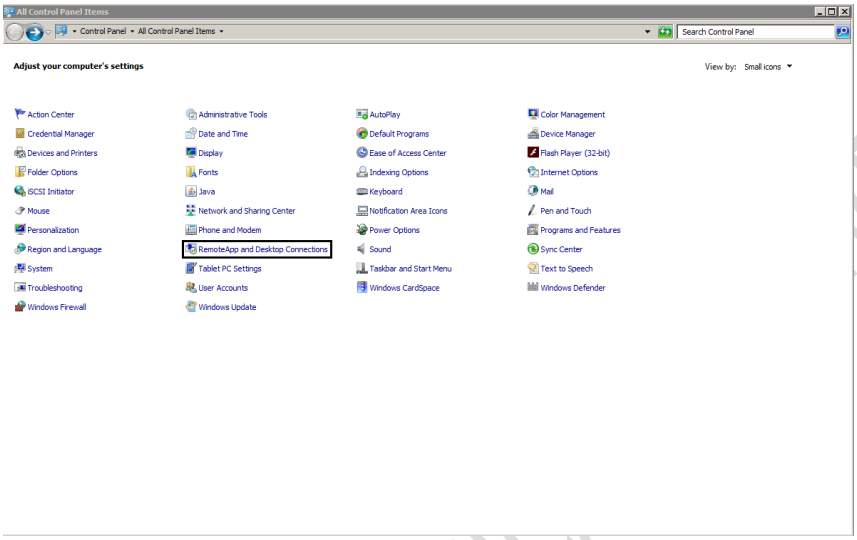
3.2 THE REMOTEAPP CONTROL PANEL

A. The RemoteApp and Desktop Connections Control Panel is available on Windows 7, Window 8, and Windows 10 desktops.

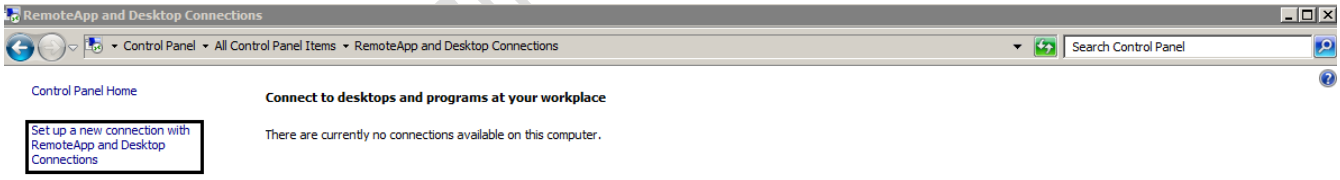
B. From this wizard you can enter the connection URL for the RemoteApp Web feed and it'll prompt you for your domain credentials.

C. The applications from the RemoteApp web site will be synchronized to your start menu so you quickly launch these applications without using your web browser. Just bring up Start -> click on RemoteApp and Desktop connections -> and click the RemoteApp.

D. To configure this option go to Start Menu -> click on Control Panel -> click on Remote App and Desktop Connections

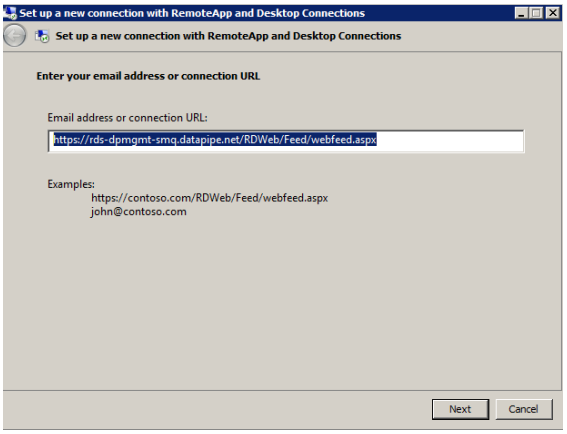


E. Click on set up a new connection with RemoteApp and Desktop Connection



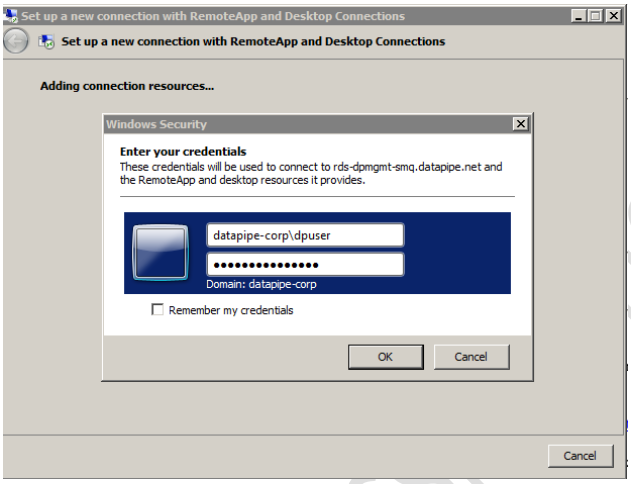
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F. SMQ: https://rds-dpmgmt-smq.datapipe.net/RDWeb/Feed/webfeed.aspx

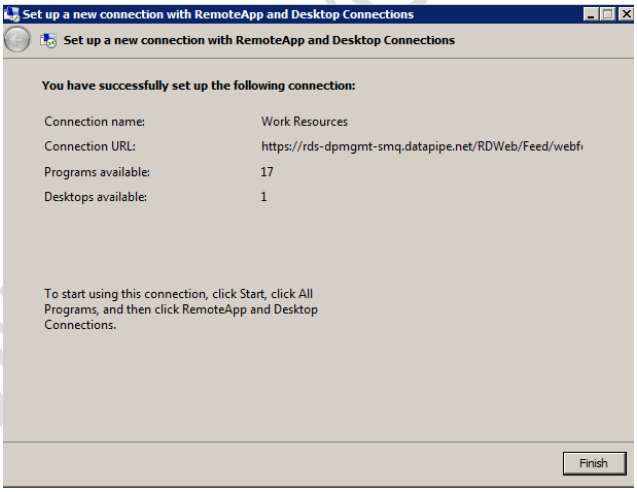


G. You will be prompted for your active directory credentials to establish the connection

NOTE: You will need to put datapipe-corp\ in front of your active directory username

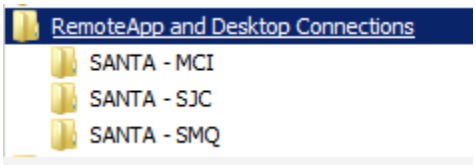


H. Validate that you have successfully connected and that your apps are available.



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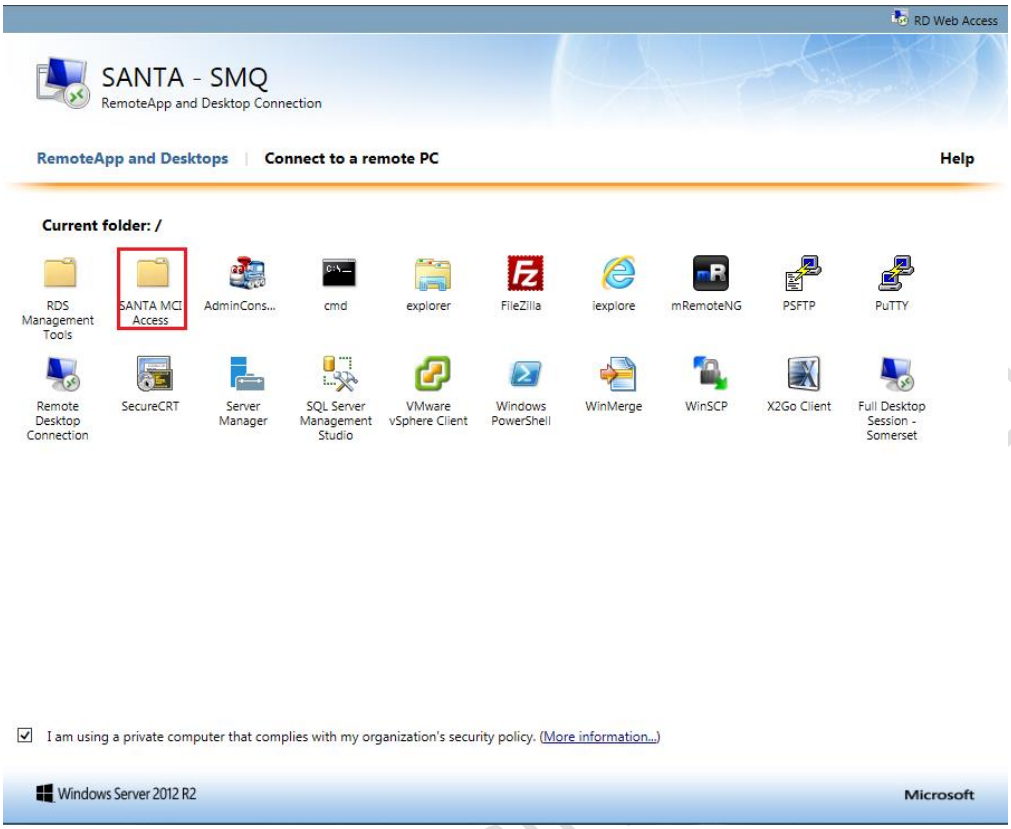
I. Each SANTA location can be added as a RemoteApp and Desktop Connection. This will alow quick access to other regions, primarily during a disaster recovery situation. However, only the region that you're connected via VPN will be accessible.



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3.3 MANAGING LEGACY LAYERED TECH RESOURCES

SANTA has been deployed on the legacy Layered Tech premises and to their network. Connecting to this SANTA network will establish network connectivity into the legacy LT customer system components. However, to reduce operational burden, every SANTA network will allow you to jump to SANTA MCI without adjusting your VPN connection. You can simply launch the MCI SANTA RemoteApp from your local SANTA site.



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4 SANTA UNIX RESOURCES

If you prefer to leverage the UNIX resources of SANTA to manage client system components, there are several ways to do this.

- UNIX Jump Host
- Graphical Desktops

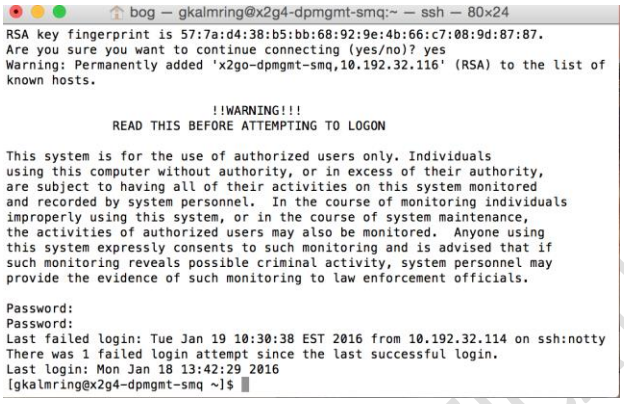
4.1 CONNECT TO SSL VPN

Please see section 1 for instructions on how to connect to the SSL VPN

4.2 UNIX JUMP HOSTS

A. This method allows you to utilze a local terminal on a load balanced RHEL jump host.

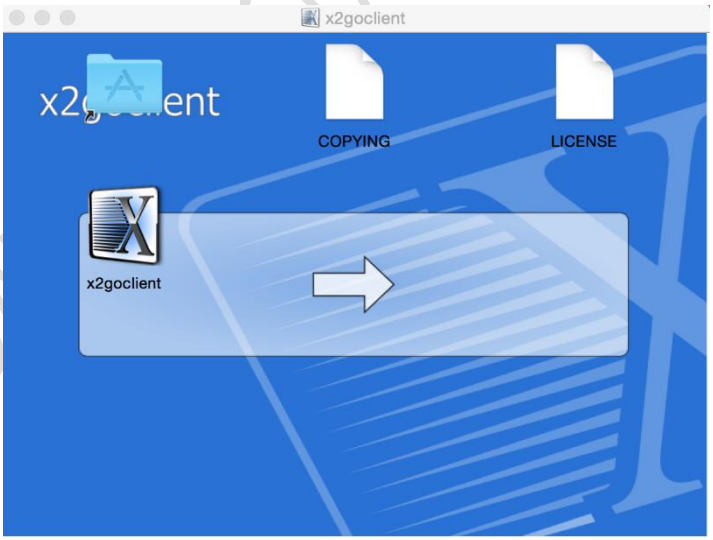
B. To access a jump host, ssh to your local office VIP using your active directory credentials. Using SANTA SMQ as an example, enter the command: `ssh dpuser@unix-dpmgmt-smq.datapipe.net` or `ssh dpuser@x2go-dpmgmt-smq.datapipe.net`



4.3 GRAPHICAL DESKTOPS

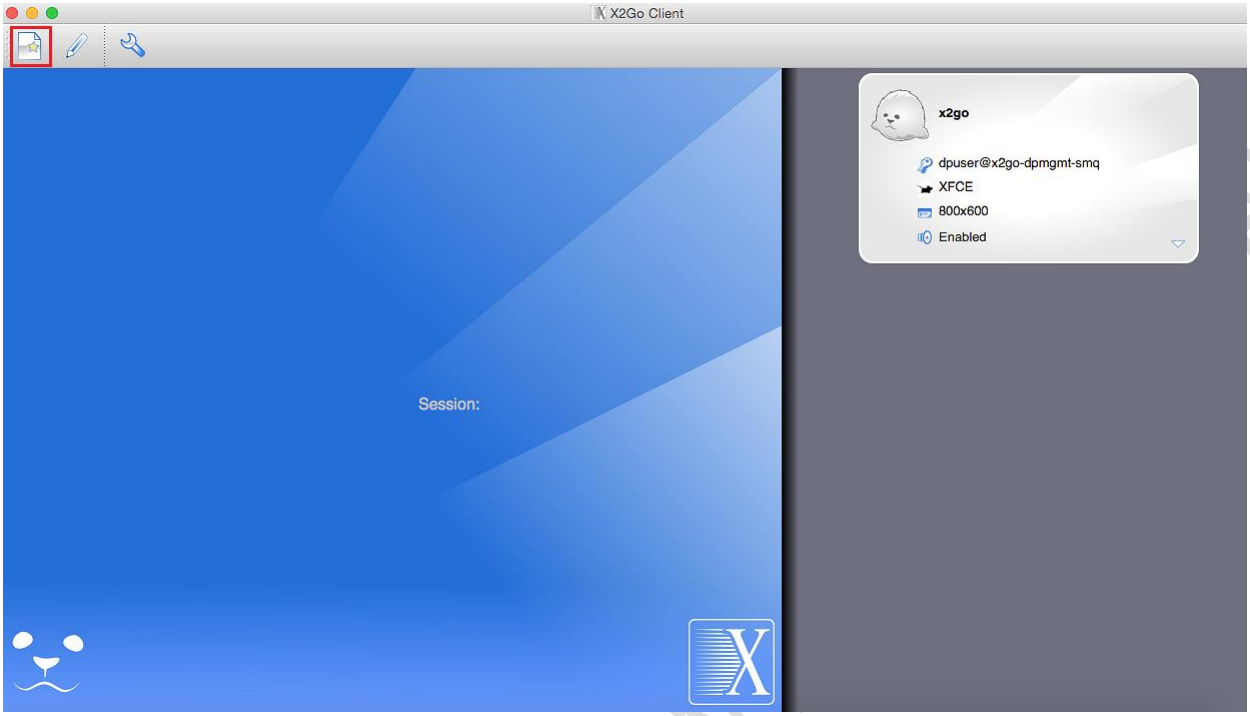
A. This feature allows you to leverage a full desktop via the X2GO client. Various UNIX based X11 window managers can be accessed using this method, the window manager that we will be utilizing for this example will be XFCE.

B. Open the application labeled 'x2goclient' that can be found on your Mac Desktop.



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C. Click on the highlighted button to create a new session.



D. Configure the session as follows:

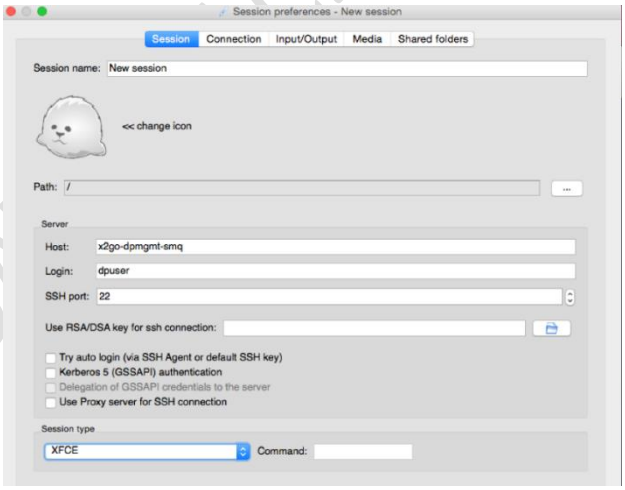
- Host: unix-dpmgmt-smq.datapipe.net
- SSH Port:22
- Session Type: XFCE

NOTE: This will connect via SSH and generate a desktop session with one of the UNIX hosts.

NOTE: If you would like to change the window manager for the session, the GNOME session type is no-longer supported, and is not compatible.

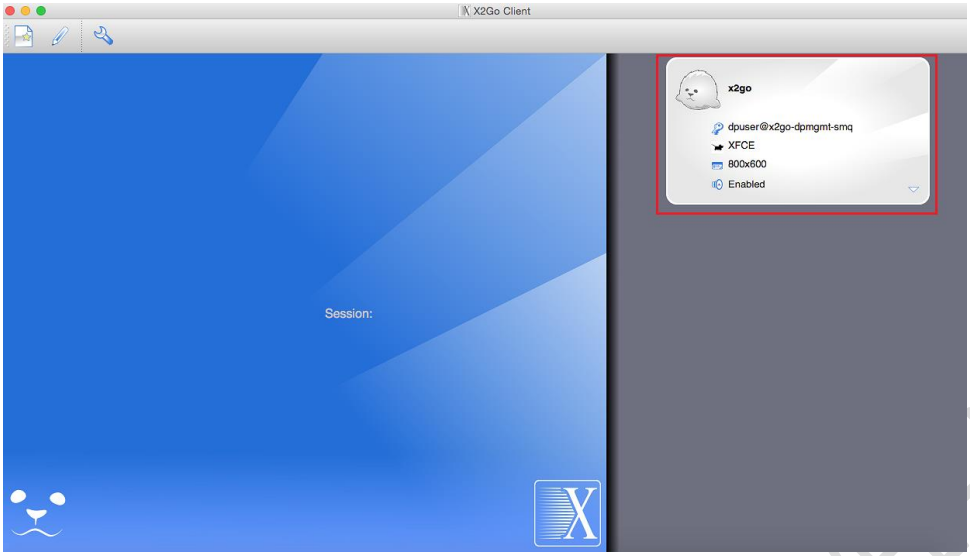
NOTE: The available and Working Session Types are KDE, XFCE, and MATE

E. Press 'OK' after validating these changes.

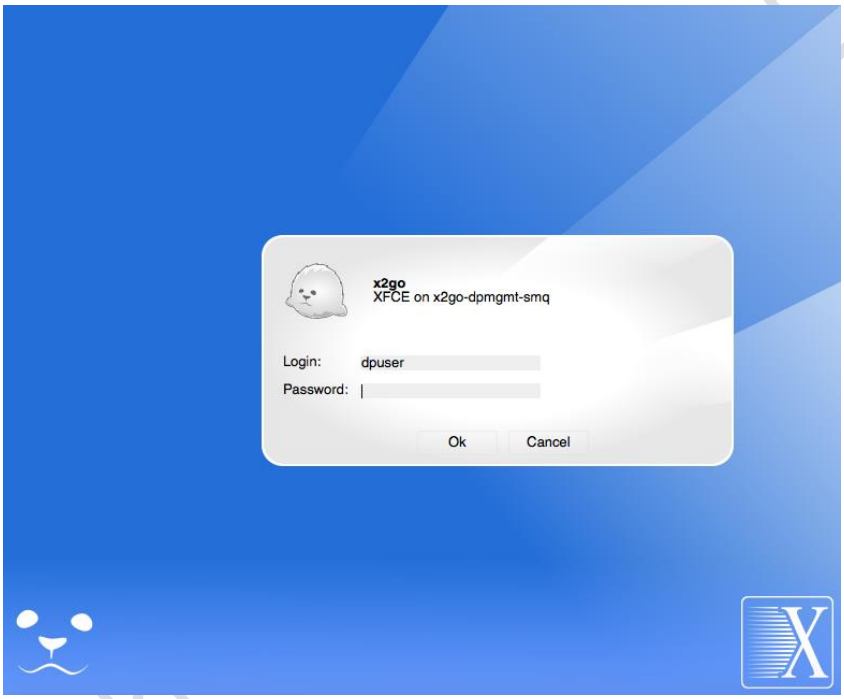


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F. The saved session will appear in the top right hand side. Click on the session to start connecting.

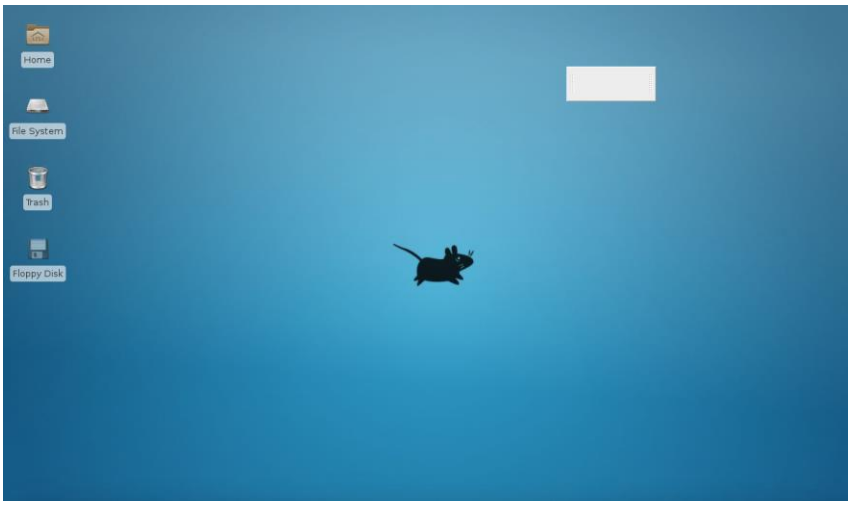


G. Enter your Active Directory Username and Password in the login credentials box.



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H. After pressing 'OK,' your full desktop will start.



4.4 MANAGING LEGACY LAYERED TECH RESOURCES

SANTA has been deployed on the legacy Layered Tech premises and to their network. Connecting to this SANTA network will establish network connectivity into the legacy LT customer system components. However, to reduce operational burden, every SANTA network will allow you to SSH jump to SANTA MCI without adjusting your VPN connection.

While connected to a UNIX host terminal or from a Graphical desktop, you can jump by using SSH to connect to the SANTA MCI VIP unix-dpmgmt-mci.datapipe.net

4.5 UNIXOPS ACCESS

UNIXOPS Access is available from all SANTA environments.

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5 ADDITIONAL INFORMATION

5.1 SECRET SERVER INTERGRATION

Secret Server Integration is now available from all SANTA environments. You may access secret server from any of the following options.

- Windows PowerShell RemoteApp or Graphical Desktops
- Secret Server utilities via a UNIX jump host or Graphical Desktop
- The Secret Server Web Interface via a SANTA RemoteApp or Graphical Desktop

5.2 INTERNAL WEB PORTAL ACCESS

Datapipe internal web resources can be accessed from within the SANTA Network. You may access any of the following sites below within a web browser via RemoteApp, SSH TUNNEL or Graphical Desktop.

- https://admin.mydatapipe.com
- https://cms.dpcloud.com
- https://github.datapipe.net
- https://pipeline.datapipe.com
- https://secretserver.datapipe.net
- https://observer.datapipe.com
- https://monitoring.dpcloud.com
- https://monitoring.dpcloud.com
- http://jenkins.automate.datapipe.net
- https://sso2.datapipe.com
- https://portal.datapipe.net
- https://zerobin.datapipe.net
- https://wiki.datapipe.net
- http://wiki.datapipe.n,et
- https://artifactory.automate.datapipe.net
- http://pastebin.datapipe.net

5.3 DISASTER RECOVERY

In the event you are unable to access or use your local SANTA network, the following recovery sites have been established. Please immediately connect to your applicable DR site in the event of availability issues. You can find the connection information for all sites in the purpose and scope section above.

SMQ	→	SJC
SJC	→	SMQ
MCI	→	SMQ
HKG	→	LON
LON	→	HKG

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5.4 HELP VIDEOS

5.4.1 USING SANTA FROM A WINDOWS COMPUTER

- Connect to SSL VPN
- The RDWeb Access web site
- The RemoteApp control panel
- The local Remote Desktop Client.
- Full Desktop via RDP Client

5.4.2 USING SANTA FROM A MAC COMPUTER

- Connect to VPN
- Load Balanced Session host
- Graphical Desktops via X2GO

5.5 FEEDBACK

5.5.1 BUG REPORT FORM

Submit a bug report form here.

5.5.2 FEATURE REQUEST FORM

Submit feature requests here.

5.5.3 NO NETWORK ACCESS IP FORM

Submit missing network access here.

5.5.4 SANTA SLACK CHANNEL

Submit any other inquiries via our slack channel #santa-support.

5.6 FAQ

Coming Soon

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