Technical Checklist

"NovaBACKUP Cloud 19"

This document provides you with a Checklist which will guide you through all necessary settings and preparations to in order to ensure a smooth and stable operation of the NovaBACKUP Cloud (formerly xSP) solution.

Please make sure that you go through each of the listed tasks and mark them as completed in the right column.

Checklist for the Storage Server

	Windows Host Server Configuration	
1.	**Download the latest Version of NovaBACKUP Cloud (formerly xSP) and documentation** http://filestore.novastor.com/Downloads/NovaBACKUP/Current/NovaBACKUP-xSP.zip	
2.	**Windows Server meets all necessary System Requirements** Refer to the current Quick Start Guide provided by the download link above	
3.	**This Windows Server is used for NovaBACKUP Cloud components only!** Do not run applications which are not related to the operation of NovaBACKUP Cloud	
4.	**All current Windows updates are installed**	
5.	**Ethernet drivers are up-to-date**	
6.	**Automatic Windows Updates are disabled**	
7.	**Port 308 inbound open (Windows Firewall)**	
8.	**NovaBACKUP Cloud setup according to the Quick Start Guide**	
9.	**No Antivirus software scanning on Storage Server directories** (Program, Program Data, Temp directory, Storage devices)	
10.	**Disable the Windows Data Execution Prevention (DEP) for NovaBACKUP Cloud**	

	Configuration of internal network and internet connection	
11.	**Static IP Address (public address) for Storage Server configured** No DSL connection with forced disconnections or IP-Address changes	
12.	**Open inbound port 308 on firewall**	
13.	**Check your logs of switches / firewall appliances for network error messages** No Port monitoring or Deep Stateful inspection for port 308	

	Configuration of Storage Server and Storage	
14.	**Configuration Manager: Work directory must have enough free space** a) Do not use NAS or USB devices for the "Work" directory! b) Min. free space = 1.5 times the size of the biggest file of any backup job c) Go to tab "Directories" and change the "Work" directory to a local disk providing sufficient free space. Restart the "Backup Server" service!	
15.	**Configuration Manager: Configure and assign backup storage** **Please Note:** • Do not use drive C:\ as destination storage. • Always use dedicated internal/external storage for backup data. • External storage could be DAS, iSCSI, SAN, NAS **If you use a NAS or network share as storage device:** a) Set the required user and access rights on the NAS side! b) Run the "Backup Server" service with admin rights! c) Use the same username/password on the NAS and for the "Backup Server" service Finally click "Apply" to activate all changes and the new configuration	
16.	**Configuration Manager: Setup of a new Client Account** a) Tab "Accounts": new account created/enabled (check box "This account is enabled"!) b) Tab "Accounts": number of computers configured and allowed (check box) c) Select the desired backup storage location under "Configure Primary Storage Location"	
17.	**Configuration Manager: Define custom directory for Log files** **Please Note:** Do not use drive C:\ as destination for the log files! Enter Tab "Logging" and define new log file directories	

Checklist for the NovaBACKUP Cloud Client

Please make sure that you go through each of the listed tasks and mark them as completed in the right column.

	NovaBACKUP Cloud Client side - Windows Host Configuration	
1.	**Please make sure that all Items of the Storage Server checklist are completed before you continue**	
2.	**The Windows System which hosts the NovaBACKUP Cloud Client meets all necessary System Requirements** Refer to the current "Quick Start Guide" provided by the download link in the Storage Server checklist above	
3.	**No other Backup Applications or Services are installed or running!**	
4.	**Apply Service Packs, Updates and drivers** a) All current Windows, SQL and Exchange related updates are installed b) Automatic Windows updates should be disabled c) Ethernet drivers are up-to-date	
5.	**Exclude all NovaStor and NovaBACKUP directories from Anti-Virus software scanning** Please exclude following directories a) Program & Program Data b) Temp directories defined in "Default settings" and "Advanced" options of xSP device	

	Configuration of internal network and internet connection	
6.	a) No forced IP address change on DSL b) Prevent non NovaStor related services from communicate on port 308 and 4502 (Port 308 is registered to NovaStor. No other application should use this port!) c) Disable port monitoring / deep stateful inspection on the firewall for ports 308 and 4502 d) Check the logs of switches / firewall appliances for network issues	

	Configuration of the NovaBACKUP Cloud Client	

7.	**Install the NovaBACKUP Cloud client**
	    a) Execute the NovaBACKUP Cloud client installer (NovaBACKUP) and follow the installation process **Admin rights needed!**
	    b) Always run GUI with admin rights
	        o NovaBACKUP icon => right click => properties of => compatibility => option "run as Admin"
	    c) Open GUI for the first configuration	

8.	**Configure the Temp directory**
	    1) Cancel the window configuring the xSP device!
	    2) Change temp directory in "Default settings" (recommended!)
	        a) Tab "Advanced Options": Change "Temporary Files directory" to another local disk other than drive C:\
	          i) Plan enough disk capacity for "Temp Files dir"
	            *(1) (min. free space = size of biggest file of any backup set * 1.5)*
	            *(2) Do NOT use NAS or USB devices for the "Temp Files directory!
	                Use a local drive!*
	          ii) Use a short path name for new temp directory, e.g. D:\NovaTMP
	        b) Stop & Restart the "NovaStor NovaBACKUP Backup/Copy Engine" Service after changing the "Temp" directory
	        c) Exclude new temp directories from Anti-Virus scanning.	

9.	**Configure "CMon Server" setting if Central Monitoring Console (CMon) is utilized**
	    a) Enter Default settings and then "CMon Server"
	    b) Fill the required fields and then start the "Backup Client Agent Service" by clicking the button "Start Service"
	    c) Check if the client is available now in the CMon under Agents and Groups.	

10.	**Create NovaBACKUP Cloud Device (formerly xSP)**
	Please Note: Make sure you created an account on the Storage Server first before you try to connect the client
	
	    a) Enter the Tab "Device" in the advanced screen of the NovaStor client
	    b) Click on "Add" and select "xSP Account"
	    c) Fill the required fields like IP address/DNS name of storage server and login credentials
	    d) Click "OK" and wait for a new license pushed by the storage server
	    e) Restart client if license was received	

11.	**Define/move Temp Cache Dir for xSP Device** **Please Note:** • Do not use the same directory for the xSP device as you already defined for the temp directory in the default settings! • For "Temp backup files" do NOT use NAS or USB devices! Use a local drive! a) Right click on the xSP device and select "Properties" b) Enter Tab "Advanced" and select another local disk/partition than drive C: under "Temporary Files Folder" c) Plan enough disk capacity for the "Temporary Files Folder" directory o min. the same capacity as the size of the backup data volume d) Select a dedicated directory for the xSP temp e) Use a short path name, e.g. D:\NovaxSPTMP and select "Move Folder"	
12.	**Start creating all necessary backup jobs** **Please Note: Do not include directories like Windows, System, Program or Temp in file backup jobs!**	

Checklist for the Central Monitoring Console (CMon)

Please make sure that you go through each of the listed tasks and mark them as completed in the right column.

	Windows Host Preparation & Configuration	
1.	**The Windows System which hosts the CMon meets all necessary System Requirements** Refer to the current "Quick Start Guide" which is part of the NovaBACKUP Cloud (formerly xSP) package download http://filestore.novastor.com/Downloads/NovaBACKUP/Current/NovaBACKUP-xSP.zip	
2.	**Please Note:** This checklist is based on default setting. If you modified the port settings etc. you need to regard to this respectively when you follow the checklist.	

3.	**Open incoming port 4502 on all related firewalls**
	
	IIS Server configuration
	   a) IIS 9 or higher should be installed
	   b) Install
	        o all compatibility options for IIS 9
	        o common HTTP Features (all options)
	        o Application Development (all, but not "CGI" and "Server Side Includes")
	        o Security (Request Filtering only)
	        o Management Tools (all, incl. IIS 6 Management Compatibility)
	Non IIS Server configuration
	   a) Select local webserver during the CMon installation
	   b) if the installer show the message that port 80 is in use
	        o check if the IIS is already installed or another application is using port 80
	        o if necessary, select another port (e.g. 10000) and open this port on the firewall.	

4.	**MS SQL Server preparation** The backend of the program is SQL based. SQLite which requires no installation is bundled with the CMon. It's recommended to use a Microsoft SQL Database. **Please Note:** If you already have a MS SQL Server running in your network and you want to utilize it with the CMon, do NOT install a local MS SQL!	
5.	**For the CMon installation and setup please follow the CMon Instruction Manual** http://files.novabackup.com/wp-content/images/UM-NovaBACKUP-19-0-CMon-User-Manual-EN.pdf	

6.	**MS SQL Server settings during CMon installation**
	Please Note:
	The scan will only find a MS SQL Server if you enabled the SQL Browser Service on your MS SQL!
	
	If you have a MS SQL server running
	
	      a) select "Microsoft SQL Server"
	      b) the installer scans for all MS SQL Servers in your network
	      c) select the desired MS SQL Server
	      d) for authentication on the SQL Server you need the password from user "sa"
	      e) next screen requires the Windows administrator password of the SQL server	

7.	**First Login to the CMon via Web-Browser**
	
	   a) This will be the IP address that you utilized during the CMon installation. Any HTML5 based web browser will work, Internet Explorer 11+, Chrome, Firefox, Android, IOS.
	   b) Login
	      a. The default login user is admin
	      b. The default password is admin.	

	Connecting the Agent to the CMon	

8.	Now that you have the CMon successfully installed it's time to connect an agent to it.
	
	   a) The first thing you need to do is install the NovaStor Client (agent) on the machine you'd like to backup.
	   b) On the NovaStor client enter the "Default Settings" area to configure the connection to the CMon Install
	   c) Click on the "CMon Server" tab
	   d) Within this tab you will need to fill in the URL or IP address of the machine where you have installed the CMon along with the port number if you've changed it. The Default Group option on this screen will automatically place this agent into the group specified on the CMon. (In general you do not need to enter any- thing in the "Default Group" option at this point)
	   e) Start and enable the "Backup Client Agent Service" by pressing the button "Start Service"
	   f) Press Ok to save these changes. You can now exit NovaStor.
	   g) Now you have the agent connected to the CMon.
	   h) Login to the CMon and see the agent either under the "Pending" group or the group you have defined as "Default Group" under d)	

Contact Us

NovaStor Software AG
Baarerstrasse 20CH-6304
Zug, Switzerland
Tel +41 (41) 712 31 55
Fax +41 (41) 712 21 56

NovaStor Corporation
29209 Canwood St.
Agoura Hills, CA 91301 USA
Tel +1 (805) 579 6700
Fax +1 (805) 579 6710

NovaStor GmbH
Neumann-Reichardt-Str. 27-33
D-22041 Hamburg, Germany
Tel +49 (40) 638 09 0
Fax +49 (40) 638 09 29

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