Release Notes

SonicOS

SonicOS 5.5.2.1 Release Notes

Contents

Platform Compatibility	1
Known Issues	
Resolved Issues	
Jpgrading SonicOS Enhanced Image Procedures	5
Related Technical Documentation	

Platform Compatibility

The SonicOS Enhanced 5.5.2.1 release is supported on the following SonicWALL UTM appliances:

- SonicWALL TZ 100
- SonicWALL TZ 100 Wireless-N
- SonicWALL TZ 200
- SonicWALL TZ 200 Wireless-N
- SonicWALL TZ 210
- SonicWALL TZ 210 Wireless-N
- SonicWALL NSA 240
- SonicWALL NSA 2400
- SonicWALL NSA 3500
- SonicWALL NSA 4500
- SonicWALL NSA 5000
- SonicWALL NSA E5500
- SonicWALL NSA E6500
- SonicWALL NSA E7500

This release supports the following Web browsers:

- Microsoft Internet Explorer 6.0 and higher
- Mozilla Firefox 2.0 and higher
- Netscape 9.0 and higher

Strong SSL and TLS Encryption Required in Your Browser

The internal SonicWALL Web server only supports SSL version 3.0 and TLS with strong ciphers (128 bits or greater) when negotiating HTTPS management sessions. SSL implementations prior to version 3.0 and weak ciphers (symmetric ciphers less than 128 bits) are not supported. This heightened level of HTTPS security protects against potential SSLv2 roll-back vulnerabilities and ensures compliance with the Payment Card Industry (PCI) and other security and risk-management standards.

TIP: By default, Mozilla Firefox 2.0 and higher, and Microsoft Internet Explorer 7.0 and higher enable SSL 3.0 and TLS, and disable SSL 2.0. SonicWALL recommends using the most recent Web browser releases. If you are using a previous release of these browsers, you should enable SSL 3.0 and TLS and disable SSL 2.0. In Internet Explorer, go to Tools > Internet Options on the Advanced tab and scroll to the bottom of the Settings menu. In Firefox, go to Tools > Options on the Advanced tab, and then select the Encryption tab.



Known Issues

This section contains a list of known issues in the SonicOS Enhanced 5.5.2.1 release.

Command Line Interface

Symptom	Condition / Workaround	Issue
On SonicWALL TZ Series and NSA 240 appliances, the X2-X8 interfaces cannot be configured from the CLI. An error may be reported, and the interfaces remain configured with the previous settings when viewed in the Web management interface.	Occurs when the X2-X6 interfaces are configured as "PortShield to X0", and then the CLI is used to modify their IP address or zone settings. Workaround : Use the Web management interface to configure X2-X8.	80208

Log

Symptom	Condition / Workaround	Issue
A UTM appliance no longer records log information after hitting a maximum number of entries.	Occurs when a UTM appliance records 400 log entries from various traffic types and the log cannot be cleared from the Log > View page.	87138

Networking

Symptom	Condition / Workaround	Issue
Select traffic types are not given access to pass networks.	Occurs when non-HTTP(S) types of traffic attempt to access a site that has been identified and enabled as set for pass network accessibility.	86539
Variable file traffic is allowed when Performance Optimization is set for GAV.	Occurs when Performance Optimization is set in the Security Services menu, and inbound/ outbound HTTP and outbound TCP is enabled for GAV.	86451
In a few reported cases, RIPv2 routing information is not recorded into the internal routing table of a UTM appliance.	Occurs when RIPv2 is used for routing in a High Availability environment and some routing information is lost during failover.	86290
OSPF cannot be disabled within any OS interface.	Occurs when a user attempts to disable OSPF on an interface and receives an error claiming, "Configuration Locked by OSPF cli."	84786
RIP is disabled on an interface, and the published network is not updated on the router.	Occurs when RIPv2 is enabled on a LAN interface and then the interface IP address is changed to a different subnet.	83512
SonicWALL security services fail to display block pages when blocking Web sites designated as Spyware, and the appliance becomes inaccessible from LAN interfaces configured for L2 Bridge mode.	Occurs only in an asymmetric routing configuration. Occurs when the firewall ARP table includes an entry for the LAN host. Workaround : Delete the LAN host entry from the ARP table.	79478
Changing the zone assignment of an interface leads to the user being unable to edit the DHCP relay policy for that interface.	Occurs when an interface is assigned to a customized zone and then a DHCP relay policy is configured with the customized zone as the source. If the interface is then assigned to a different interface, the DHCP relay policy can no longer be edited.	79363



In a two-firewall configuration with asymmetric routing, TCP connections are dropped with TCP handshake violation errors related to stateful inspection.	Occurs when the Disable Stateful inspection on this bridge-pair checkbox is selected, but fails to override TCP stateful inspection settings.	79353
The Default Gateway and Secondary Gateway address objects are always shown as 0.0.0.0. They can still be selected, but do not work.	Occurs when attempting to use the Default Gateway or Secondary Gateway address object in SonicOS Enhanced release 5.5. Note that the address objects are shown as 0.0.0.0 when booted to factory default settings, or if the gateways are not configured upon upgrade.	79059

SSL VPN

Symptom	Condition / Workaround	Issue
Attempts to login to the SSL VPN portal fail, and a "Login screen timed out" message is repeatedly displayed.	Occurs when attempting to login as a local user to the SSL VPN portal of a firewall over a wireless connection after first attempting to log in as admin over HTTP on the wireless and not being allowed. Workaround : Log in as admin over HTTPS, then log out. You will then be able to log in to the SSL VPN portal.	82120

VPN

Symptom	Condition / Workaround	Issue
In a site-to-site VPN tunnel, traffic from the remote to the local is occasionally dropped.	Occurs when an ICMP request is dropped by the firewall due to policy enforcement, when the local is in Layer 2 bridge mode through the X1 interface.	88379
A VPN tunnel ceases to work after connecting through a secondary WAN interface.	Occurs when a VPN tunnel using a secondary WAN fails to maintain connectivity when the primary WAN returns to service. Workaround: Manually renegotiate the VPN tunnel from the remote unit.	87500
H.323 endpoint calls made through Route- Based VPN with Tunnel Interface configured cannot be established.	Occurs when attempting to make H.323 calls from a NetMeeting client on the LAN of firewall A to the Polycom client or to the NetMeeting client on the LAN of firewall B.	81549
The Enable Windows Networking (NetBIOS) Broadcast option for a VPN Policy does not automatically create an IP Helper policy. The IP Helper policy must be added manually.	Occurs when adding a Tunnel Interface VPN Policy and selecting the Enable Windows Networking (NetBIOS) Broadcast option.	79952

Wireless

Symptom	Condition / Workaround	Issue
SSL VPN enforcement is disregarded for HTTPS traffic.	Occurs when HTTPS traffic is allowed from WLAN to WAN, while other traffic is denied by WLAN SSL VPN enforcement policies. Workaround: Create a WLAN to WAN HTTPS deny rule, or change the default allow rule to deny and create an allow rule for DNS.	85827

WWAN

Symptom	Condition / Workaround	Issue
Dial-on-Data profile does not work after Connection Model is changed.	Occurs when configuring a WWAN profile Dial-on- Data. Although the Network Connection Model is set to Ethernet with WWAN failover, the WWAN connection is invalid and all traffic is dropped. Note that this occurs occasionally, and can only be seen on failover from Ethernet WAN. Workaround: Reboot the device after changing the connection type or the WAN connection model. Only reboot if the 3G interface fails to appear or cannot obtain an IP address after a failover.	81148

Resolved Issues

This section contains a description of a resolved issue in the SonicOS 5.5.2.1 release.

Vulnerability

Symptom	Condition / Workaround	Issue
A cross site request forgery (CSRF) vulnerability exists which can allow a specifically constructed string to be executed in the context of a Web	This can occur when certain input is entered into the Web or SSH interface of the device.	91804
browser.	This vulnerability was identified and submitted through the SecuriTeam Secure Disclosure program working with Nikolas Sotiriu.	

Upgrading SonicOS Enhanced Image Procedures

The following procedures are for upgrading an existing SonicOS Enhanced image to a newer version:

Obtaining the Latest SonicOS Enhanced Image Version	5
Saving a Backup Copy of Your Configuration Preferences	
Upgrading a SonicOS Enhanced Image with Current Preferences	
Importing Preferences to SonicOS Enhanced 5.5	6
Importing Preferences from SonicOS Standard to SonicOS Enhanced 5.5	6
Support Matrix for Importing Preferences	8
Upgrading a SonicOS Enhanced Image with Factory Defaults	
Using SafeMode to Upgrade Firmware	

Obtaining the Latest SonicOS Enhanced Image Version

To obtain a new SonicOS Enhanced firmware image file for your SonicWALL security appliance:

- 1. Connect to your mysonicwall.com account at http://www.mysonicwall.com.
- 2. Copy the new SonicOS Enhanced image file to a directory on your management station.

You can update the SonicOS Enhanced image on a SonicWALL security appliance remotely if the LAN interface or the WAN interface is configured for management access.

Saving a Backup Copy of Your Configuration Preferences

Before beginning the update process, make a system backup of your SonicWALL security appliance configuration settings. The backup feature saves a copy of your current configuration settings on your SonicWALL security appliance, protecting all your existing settings in the event that it becomes necessary to return to a previous configuration state.

In addition to using the backup feature to save your current configuration settings to the SonicWALL security appliance, you can export the configuration preferences file to a directory on your local management station. This file serves as an external backup of the configuration preferences, and can be imported back into the SonicWALL security appliance.

Perform the following steps to save a backup of your configuration settings and export them to a file on your local management station:

- 1. On the System > Settings page, click **Create Backup**. Your configuration preferences are saved. The System Backup entry is displayed in the Firmware Management table.
- 2. To export your settings to a local file, click **Export Settings**. A popup window displays the name of the saved file.

Upgrading a SonicOS Enhanced Image with Current Preferences

Perform the following steps to upload new firmware to your SonicWALL appliance and use your current configuration settings upon startup:

- 1. Download the SonicOS Enhanced firmware image file from mysonicwall.com and save it to a location on your local computer.
- 2. On the System > Settings page, click **Upload New Firmware**.
- 3. Browse to the location where you saved the SonicOS Enhanced firmware image file, select the file, and click **Upload**.
- 4. On the System > Settings page, click the **Boot** icon in the row for **Uploaded Firmware**.
- 5. In the confirmation dialog box, click **OK**. The SonicWALL restarts and then displays the login page.
- 6. Enter your user name and password. Your new SonicOS Enhanced image version information is listed on the System > Settings page.



Importing Preferences to SonicOS Enhanced 5.5

Preferences importing to the SonicWALL UTM appliances is generally supported from the following SonicWALL appliances running SonicOS Enhanced:

- NSA Series
- NSA E-Class Series
- TZ 210/200/100/190/180/170 Series
- PRO Series

There are certain exceptions to preferences importing on these appliances running a SonicOS Enhanced 5.5.2.x release. Preferences cannot be imported in the following cases:

- Settings files containing Portshield interfaces created prior to SonicOS 5.x
- Settings files containing VLAN interfaces are not accepted by the TZ 100/200 Series firewalls
- Settings files from a PRO 5060 with optical fiber interfaces where VLAN interfaces have been created

Full support for preferences importing from these appliances is targeted for a future release. At that time, you will need to upgrade your firmware to the latest SonicOS Enhanced maintenance release available on MySonicWALL.

Importing Preferences from SonicOS Standard to SonicOS Enhanced 5.5

The SonicOS Standard to Enhanced Settings Converter is designed to convert a source Standard Network Settings file to be compatible with a target SonicOS Enhanced appliance. Due to the more advanced nature of SonicOS Enhanced, its Network Settings file is more complex than the one SonicOS Standard uses. They are not compatible. The Settings Converter creates an entirely new target Enhanced Network Settings file based on the network settings found in the source Standard file. This allows for a rapid upgrade from a Standard deployment to an Enhanced one with no time wasted in re-creating network policies. **Note**: SonicWALL recommends deploying the converted target Network Settings file in a testing environment first and always keeping a backup copy of the original source Network Settings file.

The SonicOS Standard to Enhanced Settings Converter is available at: <u>https://convert.global.sonicwall.com/</u>

If the preferences conversion fails, email your SonicOS Standard configuration file to <u>settings_converter@sonicwall.com</u> with a short description of the problem. In this case, you may also consider manually configuring your SonicWALL appliance.

To convert a Standard Network Settings file to an Enhanced one:

- 1. Log in to the management interface of your SonicOS Standard appliance, navigate to **System > Settings**, and save your network settings to a file on your management computer.
- 2. On the management computer, point your browser to https://convert.global.sonicwall.com/.
- 3. Click the Settings Converter button.
- 4. Log in using your MySonicWALL credentials and agree to the security statement.

The source Standard Network Setting file must be uploaded to MySonicWALL as part of the conversion process. The Setting Conversion tool uses MySonicWALL authentication to secure private network settings. Users should be aware that SonicWALL will retain a copy of their network settings after the conversion process is complete.

- 5. Upload the source Standard Network Settings file:
 - Click Browse.
 - Navigate to and select the source SonicOS Standard Settings file.
 - Click Upload.
 - Click the right arrow to proceed.



6. Review the source SonicOS Standard Settings Summary page.

This page displays useful network settings information contained in the uploaded source Network Settings file. For testing purposes, the LAN IP and subnet mask of the appliance can be changed on this page in order to deploy it in a testing environment.

- (Optional) Change the LAN IP address and subnet mask of the source appliance to that of the target appliance.
- Click the right arrow to proceed.
- 7. Select the target SonicWALL appliance for the Enhanced deployment from the available list.

SonicOS Enhanced is configured differently on various SonicWALL appliances, mostly to support different interface numbers. As such, the converted Enhanced Network Settings file must be customized to the appliance targeted for deployment.

- 8. Complete the conversion by clicking the right arrow to proceed.
- 9. Optionally click the **Warnings** link to view any differences in the settings created for the target appliance.
- 10. Click the **Download** button, select Save to Disk, and click OK to save the new target SonicOS Enhanced Network Settings file to your management computer.
- 11. Log in to the management interface for your SonicWALL appliance.
- 12. Navigate to **System > Settings**, and click the **Import Settings** button to import the converted settings to your appliance.

Support Matrix for Importing Preferences

DESTINATION FIREWALLS

		TZ100/	TZ100w/											PRO	PRO	PRO	PRO	PRO	PRO	NSA	NSA	NSA	NSA	NSA	NSA	NSA	NSA
		TZ200	TZ200w	TZ210	TZ210w	TZ170	TZ170w	TZ170SP	TZ170SPw	TZ180	TZ180w	TZ1.90	TZ190w	1260	2040	3060	4060	4100	5060	240	2400	3500	4500	5000	E5500	E6500	E7500
S	TZ100/TZ200	1	1	1	1	sc	*	*	*	se	*	se	sc	sc	sc	*	sc	30	SC.	1	sc	×	sc	sc	sc	*	sc
0	TZ100W/TZ200W	С	×	С	1	se	8	50	*	se	*	se	50	se	sc	. 50	se	50	se	1	50	50	se	se	se	50	se
U	TZ210	1	1	× -	1	sc	se	*	*	se	*	se	sc	sc	sc	SC	sc	sc	se	1	sc	8	se	sc	sc	*	se
R	TZ210W	С	1	С	1	30	SC	36	*	se	*	se	se	se	sc		se	se	se	1	se	8	se	se	se	*	30
С	TZ170	B,D	B,D	B,D	B,D	1	1	×	×	1	× -	1	1	1	*	*	sc	*	se	B,C,D	sc	*	se	sc	36	*	30
Е	TZ170W	B,C,D	B,D	B,C,D	B,D	С	1	1	×	С	1	С	1	1	sc		se	se	se	B,C,D	se	8	se	se	se	*	30
	TZ170SP	B,C,D	B,C,D	B,C,D	B,D	С	С	×	×	С	С	1	С	С	sc	80	se	50	se	B,C,D	sc	SC.	sc	se	se	sc	sc
F	TZ170SPW	C,D	B,C,D	B,C,D	B,D	С	С	С	×	С	С	С	1	С	sc	SC	se	se	se	B,C,D	se	50	se	se	se	sc	SC
1	TZ180	C,D	C,D	C,D	C,D	1	1	×	×	1	× -	1	1	1	sc	*	se	sc	sc	B,D	sc	×	sc	se	se	sc	se
R	TZ180W	C,D	C,D	C,D	C,D	С	1	С	×	С	1	С	1	С	se	. 50	se	se	se	B,C,D	se	se	se	50	se	se	50
Е	TZ190	C,D	C,D	C,D	C,D	С	С	1	×	С	С	1	1	С	sc	×	se	sc	sc	B,D	sc	×	sc	se	sc	×	sc
W	TZ190W	C,D	C, D	C,D	C,D	С	1	С	 Image: A second s	С	1	С	1	С	sc	se	se	se	se	B,C,D	50	se	se	50	se	se	50
А	PRO 1260	B,D	B,D	B,D	B,D	1	1	×	×	1	× -	1	1	1	sc	*	se	se	8	B,D	30	8	8		se	se	se
L	PRO 2040	se	50	se	se	30	30	se	*	se	*	se	se	se	1	1	1	1	1	С	1	1	1	1	1	1	1
L	PRO 3060	8	se	se	se	se	se	se	*	se	*	se	sc	se	С	1	1	1	1	С	1	1	1	1	1	1	× -
S	PRO 4060	*	se		se	30	se	*	*	se	*	se	se	se	С	1	1	1	1	С	1	1	1	1	1	1	1
	PRO 4100	32	Se .	se	se	se	36	se	*	se	*	se	se	se	С	С	С	1	С	С	С	С	С	С	С	С	С
	PRO 5060	*	se	se	50	30	*	36	*	30	*	80	30	se	С	С	С	C,E	1	C,E	C,E	C,E	C,E	C,E	C,E	C,E	C,E
	NSA 240	32	se	se	se	se	36	se	×	se	*	se	se	se	sc	se	se	se	se	1	1	1	1	1	1	1	× -
	NSA 2400	8	50	se	se	50	50	36	*	se	8	50	50	se	se	se	se	se	se	С	1	1	1	1	1	1	× -
	NSA 3500	*	8	se	se	36	×	se	×	30	*	36	se	se	sc	se	se	sc	8	С	С	1	1	1	1	1	× -
	NSA 4500	8	50	se	50	50	30	36	*	se	8	se	50	se	se	se	se	se	se	С	С	1	1	1	1	1	1
	NSA 5000	*	se	se	se	36	8	×	*	3 0	*	- 36	30	8	sc	*		se	*	С	С	С	С	1	× .	1	× .
	NSA E5500	*	se	50	se	50	50	8	*	se	*	se	se	se	se	50	se	se	se	С	С	С	С	С	1	1	1
	NSA E6500	se	se	se	se	3C	36	*	*	se	8	se	se	se	se	se	se	se	se	С	С	С	С	С	× -	1	× -
	NSA E7500	*	se		se	3C	se	36	*	se	8	30	se	se	se	. 50	se	se	se	С	С	С	С	С	1	1	1

Notes:

A - When VLANs are present, the settings file will not be accepted

B - Portshield interfaces prior to SonicOS 5.x is not supported.

C - Configuration information from extra interfaces will be removed. NAT policies/Firewall access rules and other interface-dependent configuration will also be removed

D - When importing from non-SonicOS5.x devices, the X2 interface will be configured in the DMZ zone.

E - VLANs created as sub-interfaces of the fiber interfaces will be renamed.

Supported

ж

Unsupported. While importing the settings file may be successful, firewall limitations may result in the removal of items such as DHCP scopes, VPN settings, etc.



Upgrading a SonicOS Enhanced Image with Factory Defaults

Perform the following steps to upload new firmware to your SonicWALL appliance and start it up using the default configuration:

- 1. Download the SonicOS Enhanced firmware image file from mysonicwall.com and save it to a location on your local computer.
- 2. On the System > Settings page, click **Create Backup**.
- 3. Click Upload New Firmware.
- 4. Browse to the location where you saved the SonicOS Enhanced firmware image file, select the file, and click **Upload**.
- 5. On the System > Settings page, click the **Boot** icon in the row for **Uploaded Firmware with Factory Default Settings**.
- 6. In the confirmation dialog box, click **OK**. The SonicWALL restarts and then displays the login page.
- 7. Enter the default user name and password (admin / password) to access the SonicWALL management interface.

Using SafeMode to Upgrade Firmware

If you are unable to connect to the SonicWALL security appliance's management interface, you can restart the SonicWALL security appliance in SafeMode. The SafeMode feature allows you to quickly recover from uncertain configuration states with a simplified management interface that includes the same settings available on the System > Settings page.

To use SafeMode to upgrade firmware on the SonicWALL security appliance, perform the following steps:

- 1. Connect your computer to the X0 port on the SonicWALL appliance and configure your IP address with an address on the 192.168.168.0/24 subnet, such as 192.168.168.20.
- 2. Do one of the following to restart the appliance in SafeMode:
 - Use a narrow, straight object, like a straightened paper clip or a toothpick, to press and hold the reset button on the front of the security appliance for more than 20 seconds. The reset button is in a small hole next to the USB ports.
 - Use the LCD control buttons on the front bezel to set the appliance to Safe Mode. Once selected, the LCD displays a confirmation prompt. Select **Y** and press the **Right** button to confirm. The SonicWALL security appliance changes to SafeMode.

The **Test** light starts blinking when the SonicWALL security appliance has rebooted into SafeMode.

Note: Holding the reset button for two seconds will send a diagnostic snapshot to the console. Holding the reset button for six to eight seconds will reboot the appliance in regular mode.

- 3. Point the Web browser on your computer to **192.168.168.168**. The SafeMode management interface displays.
- 4. If you have made any configuration changes to the security appliance, select the **Create Backup On Next Boot** checkbox to make a backup copy of your current settings. Your settings will be saved when the appliance restarts.
- 5. Click **Upload New Firmware**, and then browse to the location where you saved the SonicOS Enhanced firmware image, select the file, and click **Upload**.
- 6. Select the boot icon in the row for one of the following:
 - Uploaded Firmware New!
 - Uploaded Firmware with Factory Defaults New!
- 7. In the confirmation dialog box, click **OK** to proceed.
- 8. After successfully booting the firmware, the login screen is displayed. If you booted with factory default settings, enter the default user name and password (admin / password) to access the SonicWALL management interface.



Related Technical Documentation

SonicWALL user guides and reference documentation is available at the SonicWALL Technical Documentation Online Library: <u>http://www.sonicwall.com/us/Support.html</u>

For basic and advanced deployment examples, refer to SonicOS Guides and SonicOS TechNotes available on the Web site.

	TION AT THE SPEED OF BUS!	NESS.™		Login to	MySonicWALL »
HOME ¥ PRODUCTS ¥ SOL	UTIONS HOW TO E	SUY ¥ SUPPORT	★ TRAINING & EVENTS	¥ COMPANY	¥ PARTNERS
« GO BACK TO SUP DOCUMENTA	ATION	GUIDES, TES, FAQS & EASE NOTE:	-	R FORUMS KNOW	VLEDGE BASE
SUPPORT	Documentation		ASES DOWNEOADS USE		
RESOURCES	Select a product to view its available documentation				
 » Downloads • Firmware • Setup Tool (PC) • Setup Tool (Mac) • Signatures » User Forums » Knowledge Base 	Recent PRODUC			more Prod	uct Guides »
	# Date	Description			
	1 16 Sep 2009	9 SonicOS Enhanced 5.5 Active/Active UTM Feature Module			
	2 14 Aug 2009	09 SonicWALL SSL VPN 3.5 User's Guide			
	3 13 Aug 2009	SonicWALL SSL VPN 3.5 Administrator's Guide			
» Technical Tutorials	4 09 Aug 2009	SonicOS Enhanced 5.5 Single Sign-On Feature Module			
OPEN A SUPPORT CASE	5 06 Aug 2009	SonicOS Enhanced	5.5 Layer 2 Bridge Bypa	ss Feature Module	
» Web	Recent TECHNICAL NOTES			more Techr	nical Notes »
» Telephone » Partner DOCUMENTATION	# Date	Description			
	1 22 Jul 2009	GMS Licensing for Windows and UMA EM5000			
	2 02 Jul 2009	Leveraging LDAP Groups/ Users with SonicWALL UTM Appliance			
 » Product Guides » Technical Notes » FAQs 	3 01 Jun 2009	SonicWALL TZ 100/200 Safety and Regulatory Information			
	4 26 Feb 2009	Transferring SonicWALL GMS from a Windows server to a SonicWALL UMA			
» Release Notes	5 05 Dec 2008	CDP 5.0 SQL Back	up and Restore		
OTHER SERVICES	6 05 Dec 2008	CDP 5.0 SQL Back	up and Restore		
» Support Services	7 05 Dec 2008	CDP 5.0 Authorativ	e Restore		
 Support and Professional Services Brochure 	8 05 Dec 2008	CDP 5.0 Demonstration of Backing up and Restoring SQL			
E-Class Support	9 02 Dec 2008	Creating a Databas	se Maintenance Plan for S	QL Server 2005	
 Global Support Services Reference Guide 	10 22 Nov 2008	CDP 5.0 Active Directory Backup Algorithm			
» Training & Certification	11 22 Nov 2008	CDP 5.0 AB CDP E	xchange Error		

Last updated: 7/20/2010