

Troubleshooting with Sametime Configuration Validator

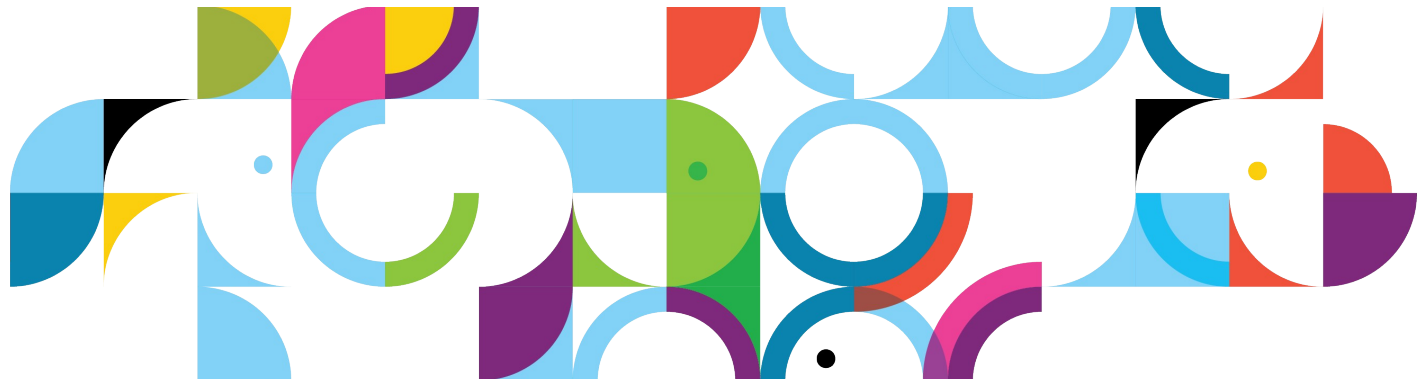
Open Mic

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IBM Collaboration Solutions



Agenda

- **What, why and when**
- **Installation**
- **Sametime serviceability perspective**
- **Environment summary**
- **Configuration validation**
- **Things to note**
- **Resource links**

- **Q&A**

What is the Sametime Configuration Validator?

- **Eclipse-based tool**
- **Workspace maintains information about each server in your environment**
- **Reviews WebSphere, Domino, and Community configuration files**
 - WebSphere configuration backup files
 - Domino databases via Database Exporter
 - Notes.ini, Sametime.ini
- **Displays all configuration data in the Configuration view**
- **Generates two reports based on the current configuration data**
 - Environment Summary Report – Sametime Specific settings across the configuration for easy review by Technical Support
 - Validation Report – Specific settings are checked for consistency, ranges, and values. Report provides a warning for configuration settings that fall outside of expected settings.

What does the Sametime Configuration Validator cover?

- **Deployment Manager Sync** – Validates that all nodes are in sync with the DMGR
- **WebSphere iFix** - Check for missing iFixes for Sametime version
- **LDAP Configuration** – Consistent across environment
- **Web SSO Configuration** – Consistent across environment
- **Domino Configuration** – Validates Domino LDAP is not running on a Sametime Server
- **Community Configuration** – Validate Community Settings for Proxy, and Meeting. Additionally checks through JVM Arguments for Community services
- **Whitespace Detection** – Checks for leading/trailing white space on values
- **STResolve Tuneup** – based on Sametime wiki article, “Optimizing Name Lookup: Sametime server”
http://www.lotus.com/ldd/stwiki.nsf/dx/Optimizing_Name_Lookup_Sametime_server
- **Meeting Server Tuneup** – based on Sametime wiki article, “Tuning the IBM Lotus Sametime Meeting server”
http://www.lotus.com/ldd/stwiki.nsf/dx/Tuning_the_IBM_Lotus_Sametime_Meeting_server

Why use the Sametime Configuration Validator?

- **It is IBM Sametime Support-in-a-box**
- **Frequent misconfigurations can be checked quickly**
- **Large or small deployments examined quickly**
 - 4 servers or 50 servers all handled
- **Removes human error**
 - meetings.company.net v's meeting.company.net
- **The tool can be run any time**

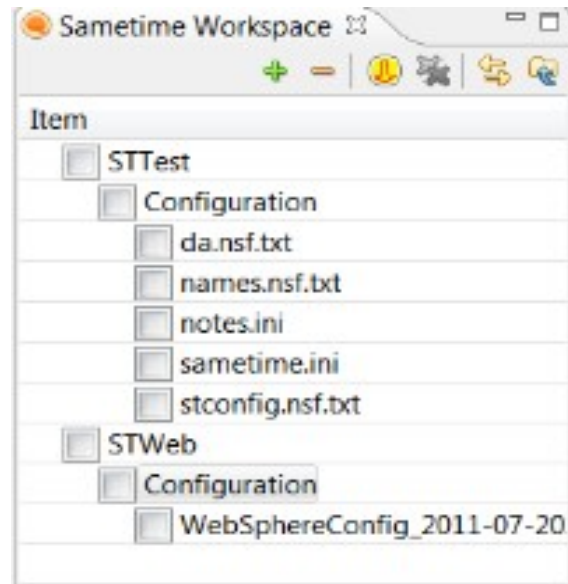
When to use the Sametime Configuration Validator

- **New deployment**
 - New Sametime service
 - New Sametime environment
 - New server
- **Configuration change**
 - Involving a service
 - Involving more than one server
- **System-wide Issue**
 - Service not functioning
 - Mass user issue
- **Support request**
 - Provide IBM Sametime Support your environment
 - At the request of IBM Sametime Support

What to add

Best Practice: Add all servers and configurations from all servers to your Sametime Workspace when validating the configuration.

Failure to load the complete environment will lead to missing important portions of the configuration.



What to add

Sametime Community

- notes.ini
- sametime.ini
- stconfig.nsf
- da.nsf
- names.nsf

Domino Servers (acting as LDAP servers)

- notes.ini
- da.nsf
- names.nsf

WebSphere server

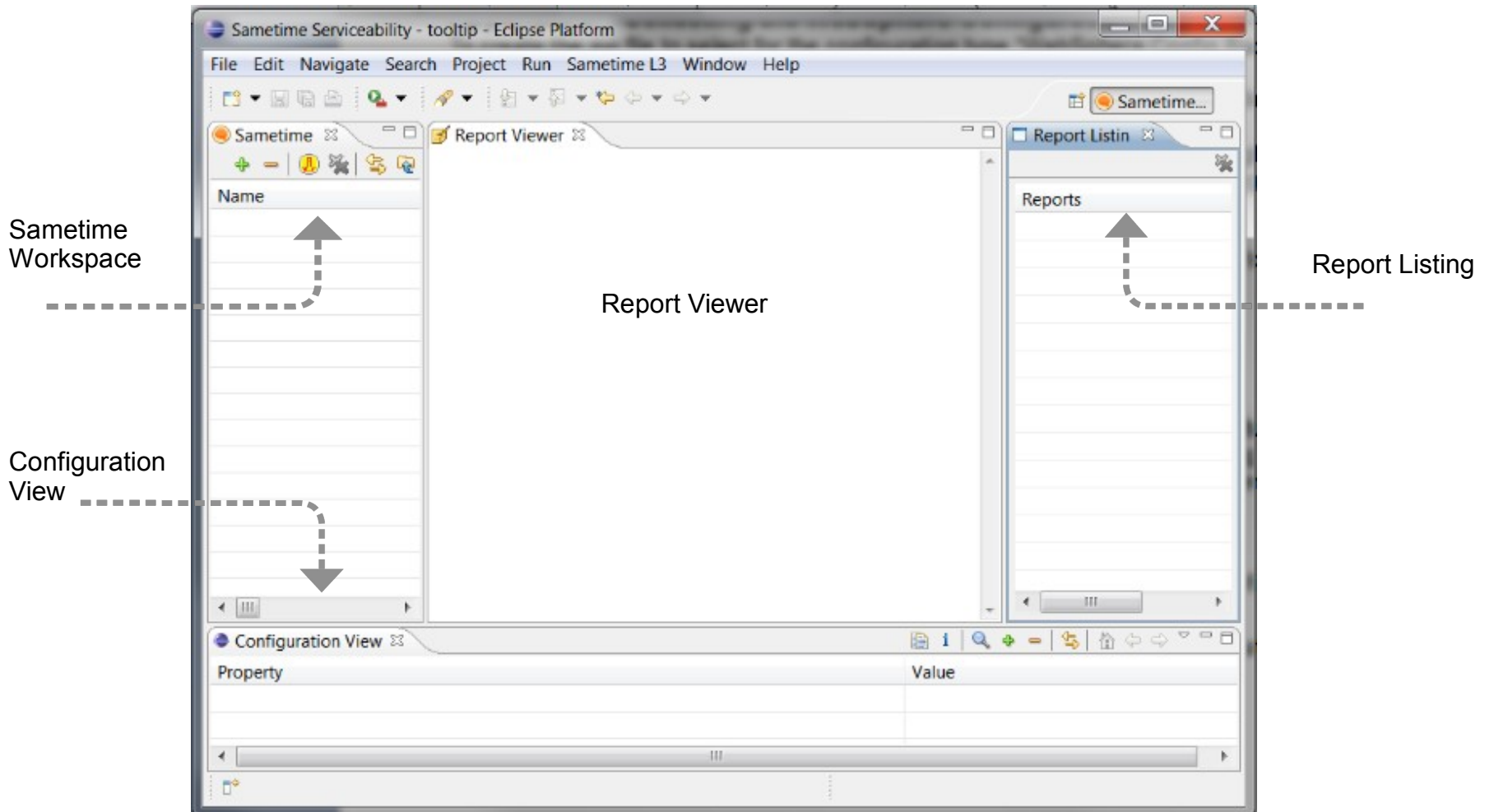
1. Go to the Websphere/appserver/profiles/<profilename>/bin directory, where <profile name> is the profile for which you want to create the backup.
2. The server must be shut down, unless you are running everything in a single Cell. If so, then do this from the deployment manager (dmgr) profile, and only the dmgr needs to be shut down.
3. Execute "backupConfig.bat"
4. This command returns a new zip file in the bin folder. It is recommended to rename this file to the name of the server.

Installing Sametime Configuration Validator

Make use of the [Sametime Configuration Validator.pdf](#)

- Install Java 6.x
- Install Eclipse 3.7.2
- Install BIRT
- Install Sametime Configuration Validator

Sametime Serviceability Perspective



Environment summary

Sametime Environment Summary - provides a complete categorized listing of settings of interest to Sametime. This is a comprehensive report for Sametime Support to use to understand your environment.

Sametime Media Configuration sametimeSTMSNode1 STMediaServer configurations

| <u>Property</u> | <u>Value</u> |
|--------------------------|--------------------------|
| DeploymentName | mediaserver1 |
| ClientHostedAudio | 2 |
| ClientHostedVideo | 2 |
| ClientAudioPort | 20830 |
| ClientVideoPort | 20832 |
| NoOfSwitchedAudioStreams | 5 |
| NoOfSwitchedVideoStreams | 1 |
| VideoSwitchingWaitTime | 3000 |
| STCommunityServerHost | chat.renovations.com |
| STCommunityServerPort | 1516 |
| ConferenceServerHost | sametime.renovations.com |
| ConferenceServerPort | 5066 |
| SIPProxyServerHost | sametime.renovations.com |
| SIPProxyServerPort | 5081 |

Environment summary

Domino LDAP Environment

Community Environment Report

Community Environment Summary

CS

Notes Address Book

Directory Assistance

| Property | Value |
|--------------------------------|---|
| LDAPSearch | 0 |
| LDAPURL | ldap.renovations.com |
| LDAPAdminDN | CN=LDAP Bind,CN=Users,DC=AD,DC=Renovations,DC=com |
| LDAPAdminPassword | Passw0rd |
| LDAPPasswordAuthenticationType | |
| LDAPTknName | |
| LDAPVendor_LDAP | 7 |
| LDAPVendor_LDAPNotes | 1 |
| LDAPWriteDN | |
| LDAPWritePassword | |
| LDAPDerefAlias | 3 |
| LDAPFilterType_LDAP | 3 |
| LDAPFilterType_LDAPNotes | 1 |
| LDAPMailFilter | |
| LDAPAuthenticationFilter | |
| LDAPAuthorizationFilter | |

Environment summary

CS

notes.ini

Notes

| Property | Value |
|--------------------------------------|---|
| SAMETIME_NAMELOOKUP_SERVER | 1 |
| JavaMaxHeapSize | 134217728 |
| ST_LDAP_SSL | 0 |
| ST_LDAP_BIND_DN | CN=LDAP Bind,CN=Users,DC=AD,DC=Renovations,DC=com |
| ST_LDAP_BIND_PASSWORD | |
| ST_LDAP_RESOLVE_PERSON | (&(objectclass=user)(!(mail=%s)(cn=%s)(samAccountName=%s))) |
| ST_LDAP_HOME_SERVER_ATTRIBUTE | |
| ST_LDAP_ADMINISTRATOR | CN=LDAP Bind,CN=Users,DC=AD,DC=Renovations,DC=com |
| ST_LDAP_PERSON_SEARCH_FILTER | (&(objectclass=user)(!(mail=%s*)(objectguid=%s)(samAccountName=%s*)(cn=%s*))) |
| ST_LDAP_PERSON_BASE_DN | DC=ad,DC=renovations,DC=com |
| ST_LDAP_BASE_MEMBERSHIP | |
| ST_LDAP_PERSON_NAME_ATTRIBUTE | cn |
| ST_LDAP_PERSON_DISTINGUISH_ATTRIBUTE | samAccountName |
| ST_LDAP_EMAIL_ATTRIBUTE | mail |
| ST_LDAP_PERSON_OBJECT_CLASS | user |
| ST_LDAP_GROUP_SEARCH_FILTER | (&(objectclass=group)(!(objectguid=%s)(cn=%s*))) |
| ST_LDAP_GROUP_BASE_DN | DC=ad,DC=renovations,DC=com |
| ST_LDAP_GROUP_MEMBERSHIP | memberOf |
| ST_LDAP_GROUP_NAME_ENTRY_ATTRIBUTE | cn |
| ST_LDAP_GROUP_DISTINGUISH_ATTRIBUTE | cn |
| ST_LDAP_GROUP_ENTRY_CLASS | group |
| ST_LDAP_GROUP_MEMBER_ATTRIBUTE | member |

Environment summary

WebSphere LDAP environment

Renovations AD LDAP

| | |
|-----------------------------|---|
| <u>Host</u> | <u>Port</u> |
| ldap.renovations.com | 3268 |
| <u>LDAP Server Type</u> | |
| AD | |
| <u>Property</u> | <u>Value</u> |
| SSL Enabled | false |
| derefAliases | always |
| referral | ignore |
| bindDN | CN=LDAP Bind,CN=Users,DC=AD,DC=Renovations,DC=com |
| connectionPool | false |
| connectTimeout | 0 |
| <u>groupSearch</u> | |
| DC=ad,DC=renovations,DC=com | |
| <u>loginProperty</u> | |
| mail | |
| cn | |
| uid | |
| <u>personSearch</u> | |
| DC=ad,DC=renovations,DC=com | |

Configuration validation

Sametime Configuration Report - provides you with detected problems in your configuration. This report will list out various tests that are performed. These tests are divided into categories such as:

- Domino
- LDAP Settings
- STResolve Tuneup
- Web SSO Settings
- ...

NOTE:

Items reported in the Configuration Report do not necessarily indicate that there is a problem with that setting. The Configuration Validation is intended to call attention to areas that are unexpected, with the intent of using this report when the environment is experiencing a problem. The report can be reviewed for areas that might be contributing to a problem.

Configuration validation

- **Tune-up checks**

- These tests look for certain configuration settings to determine if you have optimized your environment for performance
- These settings are not required; but if performance is an issue, these are things that can be tuned to help improve performance
- It is NOT recommended to perform this tuning unless your environment is experiencing performance-related issues

- **Whitespace category**

- You will have failures in this category; this is to be expected.
- Some “default” configuration settings will contain whitespace in the beginning or end of a setting. We are working to remedy this whitespace.
- The purpose of this test is to identify those areas that do contain whitespace, to flag any unexpected settings with whitespace when reviewed by Sametime Support.

Configuration validation

Sametime Proxy

Community Configuration

Node: webchatSTPNode1 Server: STProxyServer is using Community Host: chat.renovations.com Port: 1516 does not match known Sametime Community Servers

Configuration Report is showing that STProxyServer is configured to use a Community Server with Hostname chat.renovations.com and is unable to locate it in the known environment.

STResolve Tuneup

CS STResolve has been tuned.

CS

//CS*/Directory/ST_DB_LDAP_CONNECTIONS_NUMBER
Default Value Detected, tuning recommended.
This parameter increases the number of concurrent connections from the Sametime server to the LDAP server(s) specified in stconfig.nsf per black box. The default setting is set to one (1) connection per black box for a total of four Sametime connections. This setting should only be modified if requests are taking an exceptionally long time to process due to long processing queues AND there are plenty of resources available on the Sametime and LDAP servers. Increasing the value of this parameter will increase the number of LDAP threads available to service the request and multiply the resource requirements for the black boxes. The maximum number of threads specified should never exceed 5.

Here you can see that checks to see if STResolve has been tuned, has failed. This isn't necessarily a problem, however, if authentication or searches are taking a long time, you may want to follow-up on this possible lead.

Configuration validation

Servers Category

- Provides a list of all services
- Hostname when applicable to the service
- Allows you to review and check for missing services/servers


| Servers | |
|-------------------------------------|--|
| <i>Domino</i> | |
| <input checked="" type="checkbox"/> | Domino Server: CS |
| <i>Sametime</i> | |
| <input checked="" type="checkbox"/> | Meeting Server: meetingSTMNode1 HostName: meeting.renovations.com |
| <input checked="" type="checkbox"/> | System Console: sametimeSSCNode HostName: sametime.renovations.com |
| <input checked="" type="checkbox"/> | Media Conference Manager: sametimeSTMSNode1 HostName: sametime.renovations.com |
| <input checked="" type="checkbox"/> | Media Packet Server: sametimeSTMSNode1 HostName: sametime.renovations.com |
| <input checked="" type="checkbox"/> | Media SIP Proxy: sametimeSTMSNode1 HostName: sametime.renovations.com |
| <input checked="" type="checkbox"/> | Media SIP Registrar: sametimeSTMSNode1 HostName: sametime.renovations.com |
| <input checked="" type="checkbox"/> | Proxy Server: webchatSTPNode1 HostName: webchat.renovations.com |
| <input checked="" type="checkbox"/> | Community Server: CS HostName: null |
| <i>WebSphere</i> | |
| <input checked="" type="checkbox"/> | Deployment Server: DMgrNode |
| <input checked="" type="checkbox"/> | WebSphere Cluster Node: advancedSTADVNode1 |
| <input checked="" type="checkbox"/> | WebSphere Cluster Node: meetingSTMNode1 |
| <input checked="" type="checkbox"/> | WebSphere Cluster Node: sametimeSSCNode |
| <input checked="" type="checkbox"/> | WebSphere Cluster Node: sametimeSTMSNode1 |
| <input checked="" type="checkbox"/> | WebSphere Cluster Node: webchatSTPNode1 |
| <input checked="" type="checkbox"/> | WebSphere Cell: sametimeSSCCell |
| <input checked="" type="checkbox"/> | WebSphere Node: advancedSTADVNode1 |
| <input checked="" type="checkbox"/> | WebSphere Node: DMgrNode |
| <input checked="" type="checkbox"/> | WebSphere Node: meetingSTMNode1 |
| <input checked="" type="checkbox"/> | WebSphere Node: sametimeSSCNode |
| <input checked="" type="checkbox"/> | WebSphere Node: sametimeSTMSNode1 |
| <input checked="" type="checkbox"/> | WebSphere Node: webchatSTPNode1 |

Configuration validation

- If something critical like SPNEGO is missing we flag it as a warning
 - A small collection of settings that do not fall into a larger category are grouped under settings
- Examples:
- Community Login Types
 - Community Security Level
- Domino checks on all Community Servers to verify that Domino LDAP service is not active


Websphere Environment Summary

Warnings

 SPNEGO is not Present - Review Security Configuration


Settings

 Comparison Checks Completed Total: 3 Failed: 0

 Range Checks Completed Total: 0 Failed: 0

Domino

CS

 LDAP service and Sametime should not be active on same server: CS

Configuration validation

LDAP Settings

LDAP Base Group Search

- //CS/stconfig/LDAPServer/GroupBase
Setting in sync, with other values.
Value: DC=ad,DC=renovations,DC=com
- //Web/config/cells/sametimeSSCCell/wim/config/wimconfig.xml/sdo:datagraph/config:configurationProvider/config:repositories/config:ldapEntityTypes/config:searchBases
Setting in sync, with other values.
Value: DC=ad,DC=renovations,DC=com

LDAP Base Person Search

- //CS/stconfig/LDAPServer/PersonBase
Setting in sync, with other values.
Value: DC=ad,DC=renovations,DC=com
- //Web/config/cells/sametimeSSCCell/wim/config/wimconfig.xml/sdo:datagraph/config:configurationProvider/config:repositories/config:baseEntries/nameInRepository
Setting in sync, with other values.
Value: DC=ad,DC=renovations,DC=com
- //Web/config/cells/sametimeSSCCell/wim/config/wimconfig.xml/sdo:datagraph/config:configurationProvider/config:repositories/config:ldapEntityTypes/config:searchBases
Setting in sync, with other values.
Value: DC=ad,DC=renovations,DC=com

Here we can see that LDAP is appearing to be in sync, with no expected issues.

However what if one of these failed? Would that be a problem?

This is when your knowledge of your environment comes into play. Is there a reason why you would have set it up that way?

Correlating summary & validation

advancedSTADVNode1

Base Product Version

7.0.0.15

Operating System

windows

iFixes Applied

7.0.0.15-WS-WAS-IFPM36035.pak

7.0.0.15-WS-WAS-IFPM35951.pak

7.0.0.15-WS-WAS-IFPM31101.pak

7.0.0.15-WS-WAS-IFPM37276.pak

7.0.0.15-WS-WAS-IFPM34189.pak

7.0.0.15-WS-WAS-IFPM31742.pak

7.0.0.15-WS-WASND-IFPM37248.pak

7.0.0.15-WS-WAS-MultiOS-IFPM08491.pak

7.0.0.15-WS-WAS-IFPM37996.pak

7.0.0.15-WS-WAS-IFPM34957.pak

7.0.0.15-WS-WAS-IFPM37079.pak

7.0.0.15-WS-WAS-IFPM34709.pak

7.0.0.0-WS-WASJavaSDK-WinX32-IFPM36117.pak

sdk.PM36117.pak

WebSphere iFixes

advancedSTADVNode1

All iFixes Present

meetingSTMNode1

All iFixes Present

sametimeSSCNode

All iFixes Present

sametimeSTMSNode1

All iFixes Present

webchatSTPNode1

All iFixes Present

Here you can see that we have checked in the validation report that each node has the required WebSphere iFixes.

Here you can see the list of iFixes applied to advancedSTADVNode1 we have in the summary report

Resources

- **Sametime Configuration Validator wiki page**
http://www.lotus.com/ldd/stwiki.nsf/dx/Sametime_Configuration_Validator

- **Sametime Configuration Validator.pdf**
<http://www.lotus.com/ldd/stwiki.nsf/xsp/.ibmmodres/domino/OpenAttachment/ldd/stwiki.nsf/637D870A0F2F17CD85257A0F006EED99/attach/Sametime%20Configuration%20Validator.pdf>

Bugs!!!

You can submit any bugs you find or feature enhancements by submitting comments on the Sametime Configuration Validator wiki page.

Press *1 on your telephone to ask a question.



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