AutoSys - SQL Server Implementation Test Plan

Test Case Descriptor	*Base Job Scheduling Validation*
Test Case Description	The goal of this test is to validate that existing job scheduling functionality still exists in the new solution: ● Single Step jobs ● Multiple Step jobs ● Aborting
Pre-requisites	• AutoSys Event Processor must be installed and running. • Agents must be installed on the other 2 systems • SQL Server must be installed and running

Step 1	Create a “single step” test Job that runs on an SQL Target Server:
	`insert_job: testjob1`
	`command: sql_ad -T <Target Server> -J <SQL jobname>`
	`machine: <localhost>`		

Description	The function of this test is to check if the user is able to monitor a job through the AutoSys Console and execute it through the SQL Server Agent on the Target Server.		
Time Estimate	5 minutes	***Owner***	Job Scheduler
Start Date		**Completion Date**	
Expected Results	The job should run on the SQL server with verifiable results. The AutoSys Console should accurately track STARTING,RUNNING, SUCCESS, FAILURE and TERMINATED status.		
Test Results			
Comments			

Step 2	Create a “multiple step” test Job that runs on an SQL Target Server:
	`insert_job: testjob2`
	`command: sql_ad -T <Target Server> -J <SQL jobname>`
	`machine: <localhost>`		

Description	The function of this test is to check if the user is able to monitor a “multiple step” job through the AutoSys Console and execute it through the SQL Server Agent on the Target Server..		
Time Estimate	5 minutes	***Owner***	Job Scheduler
Start Date		**Completion Date**	
Expected Results	The job should run on the SQL server with verifiable results. The AutoSys Console should accurately track STARTING,RUNNING, SUCCESS, FAILURE and TERMINATED status.		
Test Results			
Comments			

Step 3	Create a test Job that specifies the starting step.
	`insert_job: testjob2`
	`command: sql_ad -T <Target Server> -J <SQL jobname> -S <name_of_step>`
	`machine: <localhost>`		

Description	The function of this test is to check if the user is able to start a “multiple step” job through the AutoSys Console from a particular step.		
Time Estimate	5 minutes	***Owner***	Job Scheduler
Start Date		**Completion Date**	
Expected Results	The job should begin execution from the specified step. Any steps defined prior to the specified starting step should not run. The job should run on the SQL server with verifiable results. The AutoSys Console should accurately track STARTING,RUNNING, SUCCESS, FAILURE and TERMINATED status.		
Test Results			
Comments			

Step 4	`Stop a job`
	`command: sql_ad -T <Target Server> -J <SQL jobname> -C STOP|stop`
	`Start the job. Use the sql_ad command line to stop.`		

Description	This function tests whether a user can stop a job running on the SQL Target Server using the sql_adapter command line.		
Time Estimate	5 minutes	***Owner***	Job Scheduler
Start Date		**Completion Date**	
Expected Results	The job should abort with a TERMINATED status in AutoSys Console.		
Test Results			
Comments			

Test Case Descriptor	***SQL Adapter Error Checking and Reporting***
Test Case Description	The goal of this test is to validate that the SQL Adapter accurately writes to log files and reports all errors. ● Standard output and Standard Error files specified ● Authentication and Permissions Checked ● Unavailable resources indicated
Pre-requisites	• AutoSys Event Processor must be installed and running. • Agents must be installed • SQL Server must be installed and running

Step 1	Create a “single step” test Job with std_err and std_out defined
	`insert_job: testjob1`
	`command: sql_ad -T <Target Server> -J <SQL jobname>`
	`machine: <localhost>`
	`std_file_out: <path/filename>`
	`std_file_err: <path/filename>`		

Description	The function of this test is to check that the SQL Adapter accurately writes all job information to the specified files.		
Time Estimate	5 minutes	***Owner***	Job Scheduler
Start Date		**Completion Date**	
Expected Results	The job should run on the SQL server with verifiable results. The Standard output and Standard error files should exists in the specified paths. The information recorded should match the most recent job history recorded by the SQL Server Agent.		
Test Results			
Comments			

Step 2	Start an existing AutoSys job where the specified Target Server is not running. The SQL Server itself should be stopped.		
Description	The function of this test is to check if the SQL Adapter is able to detect if the SQL Server is unavailable.		
Time Estimate	5 minutes	***Owner***	Job Scheduler
Start Date		**Completion Date**	
Expected Results	The adapter should return a FAILURE status and record the reason (Server not running) in the specified output and error files. The sql_ad process should exit gracefully.		
Test Results			
Comments			

Step 3	Create a test Job that specifies a job that is not currently defined in the SQL Server.
	`insert_job: testjob3`
	`command: sql_ad -T <Target Server> -J <bad jobname>`
	`machine: <localhost>`
	`std_file_out: <path/filename>`
	`std_file_err: <path/filename>`		

Description	The function of this test is to check if the SQL adapter is able to accurately determine and report if the specified job exists in the Target Server.		
Time Estimate	5 minutes	***Owner***	Job Scheduler
Start Date		**Completion Date**	
Expected Results	The adapter should return a FAILURE status and record the reason (Invalid Job name) in the specified output and error files. The sql_ad process should exit gracefully.		
Test Results			
Comments			

Step 5	Create a test Job that specifies a job step that is not currently defined in the SQL Server.
	`insert_job: testjob4`
	`command: sql_ad -T <Target Server> -J <SQL jobname> -S <bad stepname>`
	`machine: <localhost>`
	`std_file_out: <path/filename>`
	`std_file_err: <path/filename>`		

Description	The function of this test is to check if the SQL adapter is able to accurately determine and report if the specified job step exists in the Target Server.		
Time Estimate	5 minutes	***Owner***	Job Scheduler
Start Date		**Completion Date**	
Expected Results	The adapter should return a FAILURE status and record the reason (Invalid Job step name) in the specified output and error files. The sql_ad process should exit gracefully.		
Test Results			
Comments			

Step 6	Start an AutoSys job where the specified SQL job is currently running on the Target Server. The job that runs for a significant amount of time should already be running on the server. The corresponding AutoSys job should be started through the AutoSys Console.		
Description	The function of this test is to check if the SQL Adapter is able to detect if an SQL Server job is already running.		
Time Estimate	5 minutes	***Owner***	Job Scheduler
Start Date		**Completion Date**	
Expected Results	The adapter should return a FAILURE status and record the reason (Job is already running) in the specified output and error files. The sql_ad process should exit gracefully.		
Test Results			
Comments			

Step 7	Create a AutoSys user without permissions on the SQL Server.		
Description	The function of this test is to check if the SQL Adapter is able to determine and report if a use has permission to execute jobs on the Target Server.		
Time Estimate	5 minutes	***Owner***	Job Scheduler

Start Date		**Completion Date**	
Expected Results	The adapter should return a FAILURE status and record the reason (Unauthorized user) in the specified output and error files. The sql_ad process should exit gracefully.		
Test Results			
Comments			

Step 8	Specify an incorrect Target Server on the sql_ad command line or in the SQL_config.txt file.		
Description	The function of this test is to check if the SQL Adapter is able to determine and report which servers are presently configured for use.		
Time Estimate	5 minutes	***Owner***	Job Scheduler
Start Date		**Completion Date**	
Expected Results	The adapter should return a FAILURE status and record the reason (Server not Found) in the specified output and error files. The sql_ad process should exit gracefully.		
Test Results			
Comments			

Step 8	Rename, Delete or Move the sql_ad SQL_config.txt file.		
Description	The function of this test is to check if the SQL Adapter is able to determine and report missing configuration file.		
Time Estimate	5 minutes	***Owner***	Job Scheduler
Start Date		**Completion Date**	
Expected Results	The adapter should return a FAILURE status and record the reason (Server not Found) in the specified output and error files. The sql_ad process should exit gracefully.		
Test Results			
Comments			