

Annexure 02: Technology Stacks for CAS (State) and CAS (Centre)

CAS (State) will be developed in two distinct technology stacks by the SDA at the Center.

The Technical Details for CAS (State) Solution Stack 1 and Stack2, CAS (State) Offline solution, CAS (Centre) Solution are provided in subsequent tables:

CAS (State) Solution - Stack 1

The Below list is indicative only	Proposed Solution by Software Development Agency	Version and Year of Release	Original Supplier	Description (include major features/ services only)	Support Provided by
Web server	Sun Java System Web Server 7.0	7.0	SUN	HTTP Server	SUN
Application Server	Glassfish Application Server	3.0	SUN	J2EE Application Server	SUN
Database	MySQL	5.1	SUN	DB Store	SUN
Operating System	Solaris	10	SUN	Operating System	SUN
Reporting engine	Jasper Reports	3.7	Jasper	Reporting Services	
Email/Messaging	Q-Mail	1.4	Qmail Community	E-Mail Solution	
Search Engine	Search: Unstructured data: using openCMS search features Structured Data MySQL & Custom application interface	N/A	N/A	N/A	N/A
Portal Server	Glassfish Application Server	3.0	SUN	J2EE Application Server	SUN
Workflow	jBPM	4.0	JBoss	Workflow	

The Below list is indicative only	Proposed Solution by Software Development Agency	Version and Year of Release	Original Supplier	Description (include major features/ services only)	Support Provided by
Engine				Engine	
Rules Engine	Custom built	N/A	N/A	N/A	N/A
Directory Services	Sun Directory Services	7.0	SUN	LDAP	SUN
DMS/CMS	OpenCMS	7.5.1	OpenCMS	Content Management System	
Security	Physical Security, Network Security, DB Encryption (MySQL), DB Access Controls, Role Based Access Control (Custom Developed), LDAP (Sun Directory Services),	N/A	N/A	N/A	N/A
Identity Management	OpenSSO	7.0	SUN	LDAP	SUN
Audit	log4j, Custom Built application audit	N/A	N/A	N/A	N/A
ETL	Custom built	N/A	N/A	N/A	N/A

CAS (State) Solution - Stack 2

The Below list is indicative only	Proposed Solution by Software Development Agency	Version and Year of Release	Original Supplier	Description (include major features/ services only)	Support Provided by
Web server	IIS	6	Microsoft	Web and Application Server	Microsoft
Application Server	IIS	6	Microsoft	Web and Application Server	Microsoft
Database	SQL Server 2008	2008	Microsoft	DB Store	Microsoft
Operating System	Windows Server 2008	2008	Microsoft	Operating System	Microsoft
Reporting engine	SQL Server Reporting Services	2008	Microsoft	Reporting Services	Microsoft
Email/Messaging	Q-Mail	1.4	Qmail Community	E-Mail Solution	
Search Engine	Search: Unstructured data: using openCMS search features Structured Data SQL DB Search Engine & Custom application interface	N/A	N/A	N/A	N/A
Portal Server	IIS	6	Microsoft	Web and Application Server	Microsoft
Workflow Engine	Windows Workflow Foundation	N/A	N/A	N/A	N/A
Rules Engine	Custom built	N/A	N/A	N/A	N/A

The Below list is indicative only	Proposed Solution by Software Development Agency	Version and Year of Release	Original Supplier	Description (include major features/ services only)	Support Provided by
Directory Services	Microsoft Active Directory	2008	Microsoft	LDAP	Microsoft
DMS/CMS	Windows SharePoint Services	N/A	N/A	N/A	Microsoft
Security	Physical Security, Network Security, DB Encryption (MySQL), DB Access Controls, Role Based Access Control (Custom Developed), LDAP (Sun Directory Services),	N/A	N/A	N/A	N/A
Identity Management	Microsoft Active Directory	2008	Microsoft	LDAP	Microsoft
Audit	IIS Log, Custom built	N/A	N/A	N/A	N/A
ETL	SQL Server ETL	2008	Microsoft	ETL	Microsoft

CAS (State) Offline Solution

The below list is indicative only	Proposed Solution by Software Development Agency	Version and Year of Release	Original Supplier	Description (include major features/ services only)	Support Provided by
Synchronization Solution	Custom Built	N/A	N/A	N/A	N/A
Application Container	Apache Tomcat	6.0	Apache Foundation	J2EE Application container	
Database	MySQL / SQL Express	5.1/2008	SUN / Microsoft	DB Store	SUN / Microsoft

CAS (Center) Solution

The below list is indicative only	Proposed Solution by Software Development Agency	Version and Year of Release	Original Supplier	Description (include major features/ services only)	Support Provided by
Web server	Sun Java System Web Server 7.0	7.0	SUN	HTTP Server	SUN
Application Server	Glassfish Application Server	3.0	SUN	J2EE Application Server	SUN
Database	Sybase IQ Enterprise	15.1	Sybase	ETL	Sybase
Operating System	Solaris				
Others					
Reporting engine	Jasper Reports	3.7	Jasper	Reporting Services	

The below list is indicative only	Proposed Solution by Software Development Agency	Version and Year of Release	Original Supplier	Description (include major features/ services only)	Support Provided by
Search Engine	Search: Unstructured data: using Alfresco search features Structured Data: Sybase DB Search Engine & Custom application interface	N/A	N/A	N/A	N/A
Portal Server	Glassfish Application Server	7.0	SUN	HTTP Server	SUN
Workflow Engine	jBPM	4.0	JBoss	Workflow Engine	
Rules Engine	Custom built	N/A	N/A	N/A	N/A
Directory Services	SUN Directory Services	7.0	SUN	LDAP	SUN
DMS/CMS	Alfresco				
Email/Messaging	NA				
Security	Physical Security, Network Security, DB Encryption (MySQL), DB Access Controls, Role Based Access Control (Custom Developed), LDAP (Sun Directory Services),	N/A	N/A	N/A	N/A

The below list is indicative only	Proposed Solution by Software Development Agency	Version and Year of Release	Original Supplier	Description (include major features/ services only)	Support Provided by
Identity Management	OpenSSO	7.0	SUN	LDAP	SUN
Audit	log4j, Custom Built	N/A	N/A	N/A	N/A
ETL+Data Quality	Sybase ETL	15.1	Sybase	ETL	Sybase