#1920-XXXX
ACES Maintenance and Operations

ACES Environment

ACES Hardware

The ACES System resides at the State Data Center (SDC), managed by WaTech. The print services for the System reside at the Department of Enterprise Services (DES) print facility. Print services are provided at a central location and ACES produces image files that are transferred for printing. DSHS pays for this service through an agreement with DES.

The ITS team that maintains and operates ACES are all primarily located at a single DSHS office. However, there are thousands of field users across the state in Community Service Offices (CSOs) and Home and Community Services (HCS). ACES also supports two mobile CSOs with one usually in the Eastern part of the state and one in the West.

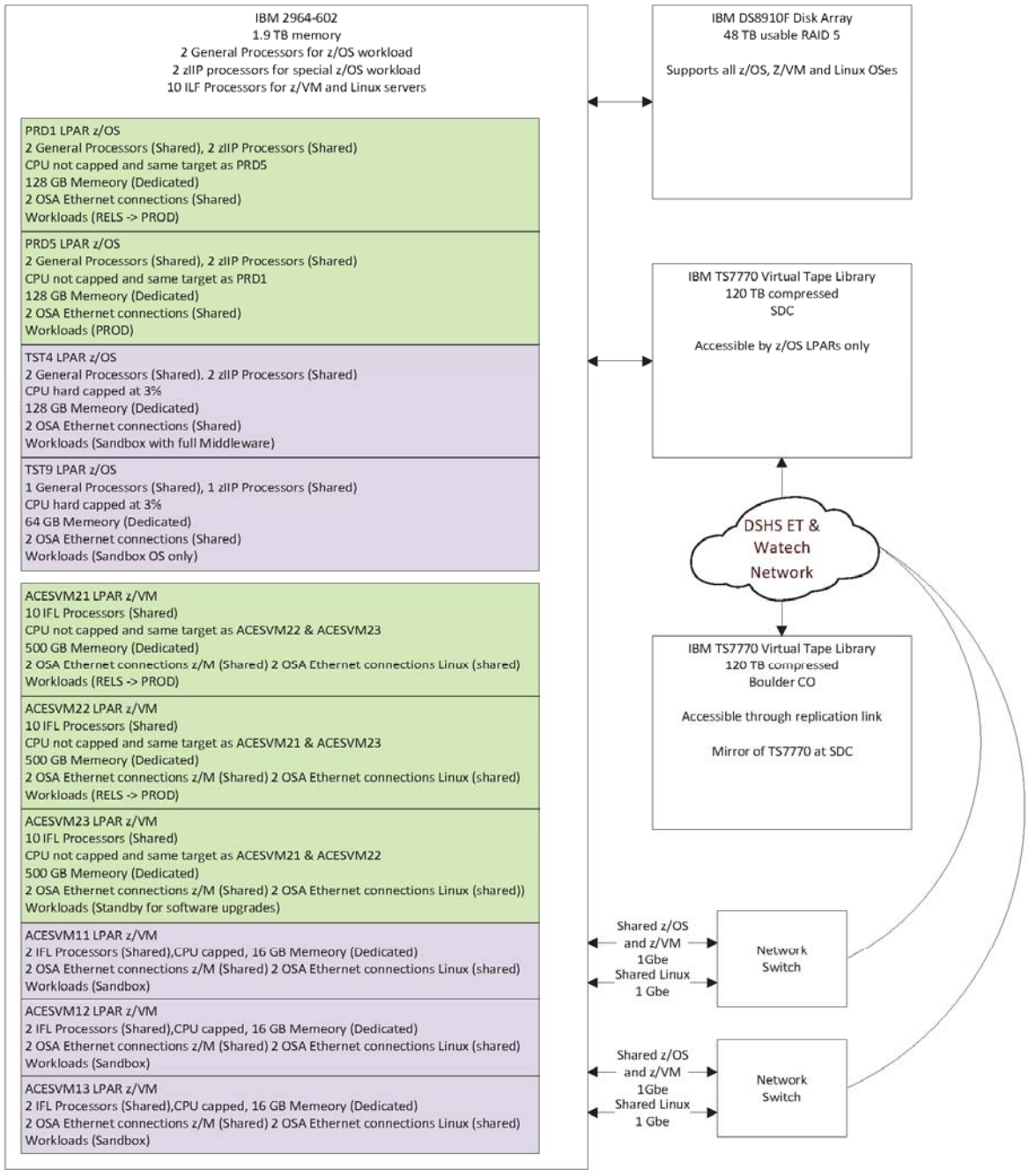
All of the ACES System hardware is owned by DSHS. The print devices shown are for clarity, but these devices are not owned by DSHS. DSHS pays for printed output as a service charged through DES.

The current DR Recovery Time Objective (RTO) is 72 hours, Recovery Point Objective (RPO) is 24 hours.

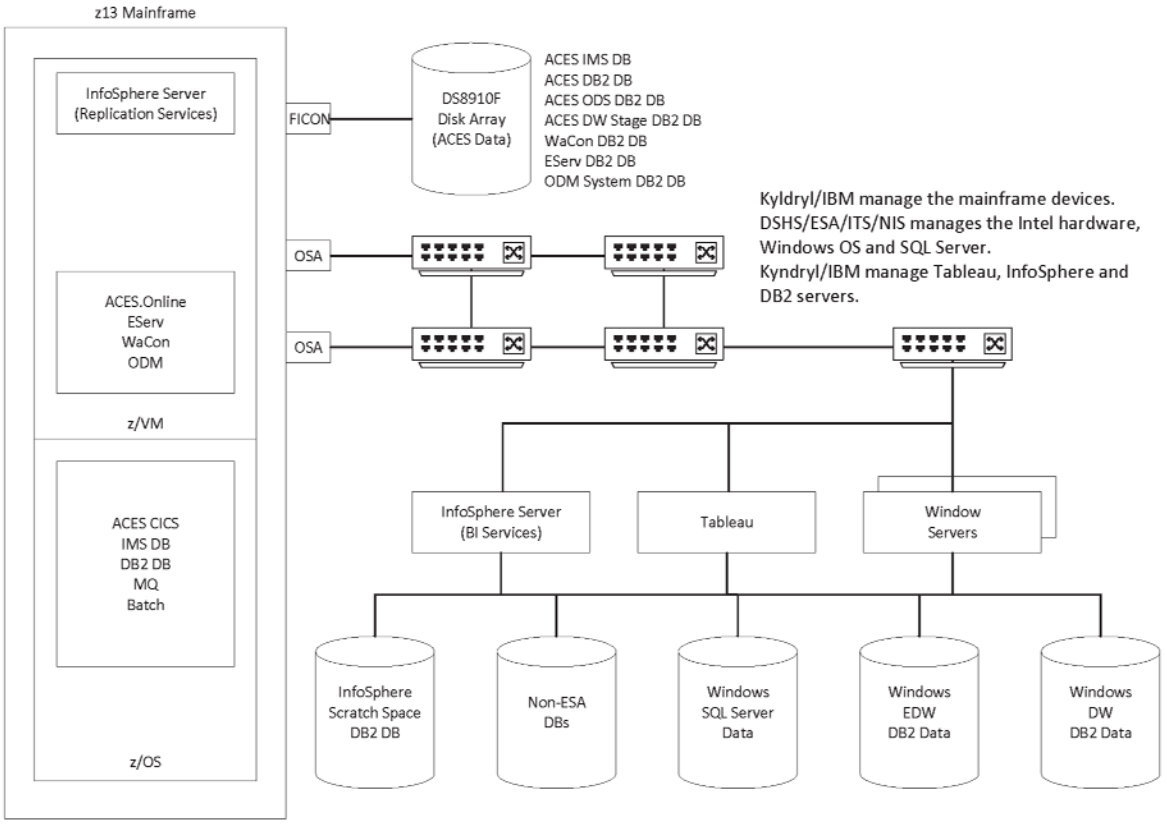
The hardware environments supports both the legacy and modernized components of the ACES application. ACES is a multi-technology platform. The legacy components are built on Windows Server Operating System using Common Business Oriented Language as the primary programming language. Data Base 2 (DB2) is used as database management systems and CICS is used for transaction processing. The modern components are built in Java.

HyperV is the virtualization hypervisor and SuSE Linux Enterprise Server is the operating system. Java is the primary programming language, with DB2 as the database server. WebSphere Application Server (WAS) is the application server container for the Java programs. WebSphere Operational Decision Manager (ODM) is the Business Rules Management System (BRMS). Tableau will provide Business Intelligence (BI) and analytics reporting services. InfoSphere Server is used for data Extraction/Transformation/Load (ETL) and data replication support.

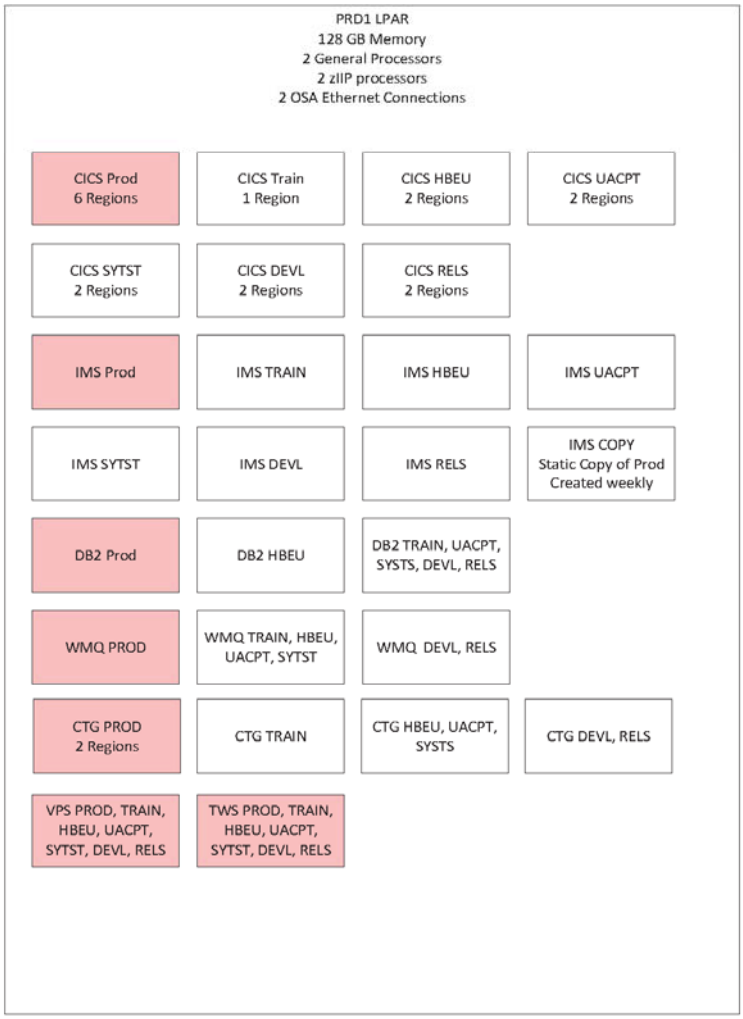
ACES Mainframe Hardware Components



EDW BI Infrastructure



ACES Prodution z/OS LPARs

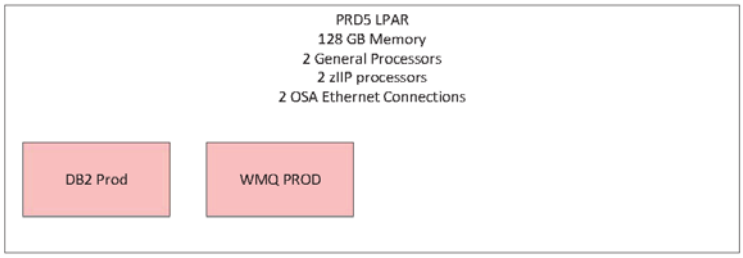


PRSM Manages CPU sharing between all z/OS LPARS since they all shared the same general and zIIP processors. The sandbox LPARs (TST4 and TST9) are capped as no more than 3% of the processors. PRD1 and PRD5 are weighted equally and are not capped, so either LPAR can exceed its defined weight if the other is not using the processors.

Within each z/OS the WLM controls priority at the task level. OS services are the highest. Production application services are next. All test services run at the same relative priority below production. Development services rum below test services.

There are shared, production only and non-production disk pools within PRD1 LPAR. The production only pools have only permanent production data. The shared pools are for transient data and very large files created during monthly processing.

All z/OS and z/VM OSes share the same OSA Ethernet cards, reside in the same subnets and are part of the same OSPF Area. This is all layer 3 traffic between LPARS and the network switches.



These are production services

ACES System Software

The following list contains the ACES System Software running in the Linux and Windows environments. It includes OS utilities, Database Management System (DBMS), communication, monitoring, middleware, and other tools that run in the server environment.

License types:

- ALC – Annual License Charge
- AMC- Annual Maintenance Charge
- MLC – Monthly License Charge
- MMC – Monthly Maintenance Charge
- OTC – One Time Charge

ACES Linux Software				
The following list contains the ACES Software titles running in the Linux environment. It includes the OS, DBMS, communication, monitoring, middleware and other tools that run in the Linux environment.				
Item #	**Manufacturer**	**Product Name**	**License Type**	**Purpose of Product**
1	Novell	SUSE Linux Enterprise Server for X86, AMD64 & Intel EM64T, Itanium & IBM Power Processors	IFL	Workstation based Linux for Linux administration
2	SUSE	SUSE Linux Enterprise Server for IBM zSeries	ALC	Linux servers for aces.online, eServ, ODM, etc.
3	Novell	SUSE Manager for Linux	ALC	Provide efficient management of Linux servers.
4	IBM	DB2 LUW	ALC	DB2 for the Data Warehouse
5	IBM WebSphere	Application Server Network Deployment	ALC	aces.online application server for each environment
6	IBM InfoSphere	DataStage and QualityStage Designer Linux	ALC	BI ETL Development workbench
7	IBM InfoSphere	DataStage Linux	ALC	BI ETL Tool - Production

ACES Linux Software				
The following list contains the ACES Software titles running in the Linux environment. It includes the OS, DBMS, communication, monitoring, middleware and other tools that run in the Linux environment.				
Item #	**Manufacturer**	**Product Name**	**License Type**	**Purpose of Product**
8	IBM InfoSphere	DataStage for Non-Production Environments Linux	ALC	BI ETL Tool - Development/Test
9	IBM InfoSphere	Information Analyzer	ALC	BI Information Analyzer
10	IBM InfoSphere	Information Analyzer Workbench Linux	ALC	BI Information Analyzer Workbench
11	IBM InfoSphere	Metadata Workbench	ALC	BI Metadata Workbench
12	IBM InfoSphere	Information Governance Catalog Linux	ALC	BI Glossary, BI Glossary Workbench, BI Glossary Anywhere - Production PVU
13	IBM InfoSphere	Information Governance Catalog for Non-Production Environments on Linux	ALC	BI Glossary and BI Glossary Anywhere - Development/Test PVU
14	DELL	Dell EMC™ Unisphere™ for the Dell EMC Unity platform	ALC	Storage management for disk array
15	DELL	Dell EMC Unity storage systems	ALC	Store and manage encryption key for disk.
16	DELL	Dell EMC Unity storage systems	ALC	Store and manage encryption key for disk.
17	IBM WebSphere	ODM Decision Center	ALC	Rules Engine development, testing and deployment
18	IBM WebSphere	ODM Decision Server Rules Edition for Linux on System z	ALC	Rules Engine runtime execution services
19	IBM WebSphere	MQ for Linux	ALC	MQ traffic for LINUX platform

ACES Linux Software				
The following list contains the ACES Software titles running in the Linux environment. It includes the OS, DBMS, communication, monitoring, middleware and other tools that run in the Linux environment.				
Item #	**Manufacturer**	**Product Name**	**License Type**	**Purpose of Product**
20	IBM	Web Content Manager Standard Edition for Linux on Z	ALC	Manage static web page content
21	Tableau	Tableau Enterprise Server	ALC	Admin for enterprise DW
22	IBM	Connections Authorized User for Linux	ALC	Admin for enterprise DW
23	Micro Focus	Micro Focus Enterprise Server Monitor and Control	ALC	Performance monitoring for CICS
24	IBM	MQ for Linux	ALC	Performance monitoring for MQ
25	Micro Focus	Micro Focus FDS	ALC	DB2 database utilities
26	Dell	SAN at rest Unity 650F DB2 Encryption Expert SSL/TLS DB to client	ALC	Data Encryption
27	IBM	Workload Schedule	TBD	Job scheduler
28	TBD	Data Dictionary	TBD	IMS definitions repository
29	Levi, Ray & Shoup	VPS/PCL	ALC	Remote printer support - AFP to PCL conversion
30	Levi, Ray & Shoup	VTAM Printer Support (VPS)	ALC	Remote printer support
31	Levi, Ray & Shoup	VPS/TCPIP	ALC	Remote printer support - TCP/IP feature
32		Tenable Security Center	ALC	Vulnerability Scanning
33		Guardium	ALC	Database monitoring
34		Splunk	ALC	Logging
35	Solarwinds	Solarwinds Suite		Network Monitoring Tool
36		ITCAM (5 Agents)	ALC	Monitors Operating System, DB2,MQ,WAS,HTTP Server Log File Reader (Not currently in use, replaced by LogStash). Maintains history. Alerts.

ACES Linux Software				
The following list contains the ACES Software titles running in the Linux environment. It includes the OS, DBMS, communication, monitoring, middleware and other tools that run in the Linux environment.				
Item #	**Manufacturer**	**Product Name**	**License Type**	**Purpose of Product**
37		LogStash	OSS	Log Monitoring and Alerting

ACES Windows Software				
The following list contains the ACES Software titles running in the Windows environment. It includes the tools that run in the Windows environment.				
Item #	**Manufacturer**	**Product Name**	**License Type**	**Purpose of Product**
1	Allen Systems Group (ASG)	Cypress	ALC	Reports management system
2	Intelligent Search Technology	CORRECTADDRESS (5 Servers)	ALC	Address verification
3	Motio, Inc	Motio CI (3 Servers)	ALC	Data Warehouse change management tool
4	IBM	Database Enterprise Developer Edition	ALC	For DBA development in Windows environment
5	IBM	DB2 Connect Enterprise Edition 25 Floating Users	ALC	To support ODBC access to ODS in mainframe DB2
6	IBM	DB2 Connect Personal Edition Client Device	ALC	Used for developers to access the mainframe DB2 UDB databases
7	IBM	Host Access Client Package for Multiplatform	ALC	ACES Mainframe LAN (consoles)
8	IBM Rational	Application Developer for Java	ALC	Eclipse-based integrated development environment (IDE)
9	IBM Rational	Architect Extension for Integrated Architecture Frameworks	ALC	Web development tool for analysis and design.
10	IBM Rational	Software Architect	ALC	Web development tool for modeling and design.
11	Micro Focus	Micro Focus Enterprise Developer 4.	ALC	Provide developers with a tool to debug code during testing
12	Microsoft	Windows Data Center Server 2016 including Hyper-V	MLC	
13	Micro Focus	Micro Focus Enterprise Server Monitor and Control	N/A	Operating system for host and tape management

ACES Windows Software				
The following list contains the ACES Software titles running in the Windows environment. It includes the tools that run in the Windows environment.				
Item #	**Manufacturer**	**Product Name**	**License Type**	**Purpose of Product**
14	Microsoft	Microsoft Active Directory Lightweight Directory Services (AD LDS)	N/A	Search and Display Spool files
15	Micro Focus	Micro Focus Enterprise Server features (Core Dump and Consolidated Trace Facility - CTF)	ALC	Troubleshooting and Diagnostics
16	Micro Focus	Micro Focus File Manager	ALC	File Manager - for viewing files and data fixes
17	Micro Focus	Micro Focus Analytics Accelerator	ALC	High performance DB2 queries
18	Microsoft	Microsoft System Center Configuration Manager SCCM	ALC	Performance Reporter - used for capacity planning
19	Microsoft	AD LDS Single Sign On	ALC	Multi-session product - NVAS
20	Micro Focus	Micro Focus Enterprise Server Monitor and Control	TBD	Tools Framework

ACES Windows Software			
The following list contains the ACES Software titles running in the Windows environment. **It includes the tools that run in the Windows environment.**			
Item #	**Product Name**	**License Type**	**Purpose of Product**
1	Jira	AMC	Application development lifecycle management
2	Confluence	AMC	Application development lifecycle management
3	GitHub	ALC	Source code management
4	Jenkins	OSS	DevOps automation
5	SonarQube	ALC	Quality code scan
6	SonarLint RAD Plugin	OSS	SonarQube plug-in
7	CheckMarx (Server)	ALC	Static code scanning tool
8	CheckMarx RAD Plugin (Client)	OSS	CheckMarx plug-in
9	SonarType Nexus	OSS	Source code management utility
10	IBM App Scan	ALC	Dynamic code scanning tool
11	Eggplant Functional	AMC	Test automation tool
12	IBM Data Studio	OSS	Database administration tool
13	Beyond Compare	ALC	Data-compare tool
14	Quick3270	OSS	Terminal emulator
15	MicroFocus Enterprise Developer	AMC	Mainframe emulator for Cobol applications
16	SnagIt	AMC	Screen capture and editing tool
17	IBM RAD	AMC	Integrated Developer Environment (IDE) for Websphere
18	IBM WAS	AMC	IBM web application server: J2EE based runtime environment
19	IBM DB2 Express	OSS	Community edition for DB2 data server
20	IBM DB2	ALC	Relational database management system
21	SQL Server	ALC	Microsoft relational database
22	SQL Developer Edition	ALC	Developer tools for SQL server

ACES Windows Software			
The following list contains the ACES Software titles running in the Windows environment. **It includes the tools that run in the Windows environment.**			
Item #	**Product Name**	**License Type**	**Purpose of Product**
23	SQL Management Studio	ALC	Integrated environment for managing SQL server
24	IBM IHS	ALC	IBM http server works in conjunction with IBM websphere
25	Microsoft IIS	Licensed with MS Windows OS	Microsoft web server: Internet information server (IIS)
26	NotePad++	OSS	Text/Source code editor
27	JRE	ALC	Java runtime environment
28	7-Zip	OSS	File archive utility
29	WinSCP	OSS	SFTP/FTP client for Microsoft Windows

ACES Open Source Software

Open Source Software Legend		
AGLP	Affero General Public License	GNU Affero General Public License is a free, copyleft license for software and other kinds of works, specifically designed to ensure cooperation with the community in the case of network server software.
Apache	Apache Software Foundation	http://www.apache.org/foundation/license-faq.html
BSD	Berkeley Software Distribution	BSD licenses are a family of permissive free software licenses, imposing minimal restrictions on the redistribution of covered software.
Freeware	Portmanteau of "free" and "software"	Computer software that is available for use at no monetary cost, which may have restrictions such as redistribution prohibited, and for which source code is not available
GPL	General Public License	GNU General Public License is a free, copyleft license for software and other kinds of works.
LGPL	Lesser General Public License	https://www.gnu.org/licenses/lgpl.html
MIT License	Massachusetts Institute of Technology	Permissive free software license that permits reuse within proprietary software provided all copies of the licensed software include a copy of the MIT License terms and the copyright notice.
MS-PL	Microsoft Public License	http://www.microsoft.com/en-us/openness/licenses.aspx

ACES Open Source Software				
The following Open Source Software titles are used as part of ACES System in web based applications				
Item #	**Product Name**	**Description**	**License Type**	**Source**
1	IBM Installation Manager	Used to download IBM software.	Freeware	http://ibm.com
2	iText	JAVA library that allows you to generate PDF files on the fly.	AGLP	http://www.lowagie.com/iText/
3	Prototype	JavaScript library used for AdmEstimation Tool.	MIT license (GNU GPL Compatible)	http://www.prototypejs.org/
4	Microsoft Enterprise Library	Microsoft Enterprise Library targets issues like logging, validation, data access, and exception handling, as well as many others. Used in Online Service Application (OSA) and Address Validation Service (AVS) to provide support for logging.	MS-PL	http://msdn.microsoft.com/en-us/library/cc467894.aspx
5	Web Service Software Factory	Integrated collection of resources designed to help you quickly and consistently build Web services that adhere to well-known architecture and design patterns.	MS-PL	http://msdn.microsoft.com/en-us/library/cc487895.aspx
6	Apache FOP	Application that reads a formatting object (FO) tree and renders the resulting pages to a specific output. Driven by XSL formatting objects.	Apache License, Version 2.0	fop.jar, Avalon-framework-cvs-100109.06.jar, batik.jar
7	Log4J	With log4j it is possible to enable logging at runtime without modifying the application binary. The log4j package is designed so that these statements can remain in shipped code without incurring a heavy performance cost. Logging behavior can be controlled by editing a configuration file, without touching the application binary. Used in PrintService for Letters to PDF to provide support for logging. Java logging framework used by MotioCI for the version control and testing product for IBM Cognos.	Apache License, Version 2.0	http://logging.apache.org/log4j/1.2/
8	clearant lib (for ClearCase)	This library is a collection of "value-add" Ant tasks for integrating IBM Rational ClearCase with Apache Ant.	Apache License, Version 2.0	http://clearantlib.sourceforge.net/

ACES Open Source Software				
The following Open Source Software titles are used as part of ACES System in web based applications				
Item #	**Product Name**	**Description**	**License Type**	**Source**
9	Spring framework	The Spring Framework is an open source application framework for the Java platform. The framework provides MVC support and flexibility to integrate Messaging, aspect orientation, enterprise apps.	Apache License, Version 2.0	http://www.springsource.org/
10	JCAPTCHA	JCAPTCHA stands for Java Completely Automated Public Test to tell Computers and Humans Apart. The open source java framework for captcha definition and integration.	LGPL v2.1	http://jcaptcha.sourceforge.net/
11	FreeTTS	Speech synthesizer written entirely in the JavaTM programming language	BSD	http://freetts.sourceforge.net/docs/index.php
12	jQuery	Fast, concise JavaScript Library that simplifies HTML document traversing, event handling, animating, and Ajax interactions for rapid web development.	MIT & GPL	http://jquery.org
13	jQuery UI	Provides abstractions for low-level interaction and animation, advanced effects and high-level, theme-able widgets, built on top of the jQuery JavaScript Library that can be used to build highly interactive Web applications.	MIT & GPL	http://jquery.org
14	Apache HTTP Server	Web Server to host static content	Apache License, Version 2.0	http://www.apache.org
15	Barcode4J	Used to apply Barcode for form 14001 generated for Eapp, used in conjunction with FOP	Apache License, Version 2.0	http://barcode4j.sourceforge.net/index.html
16	YUI Compressor	Minifies JavaScript and CSS files to improve client side performance of web applications.	BSD + MPL License	http://developer.yahoo.com/yui/compressor/
17	Yslow	Analyzes web pages and why they are slow based on Yahoo!'s rules for high performance web sites.	MPL v1.1	http://developer.yahoo.com/yslow/

ACES Open Source Software				
The following Open Source Software titles are used as part of ACES System in web based applications				
Item #	**Product Name**	**Description**	**License Type**	**Source**
18	Checkstyle	Development tool to help programmers write Java code that adheres to coding standards. It automates the process of checking Java code to spare humans of this boring (but important) task. This makes it ideal for projects that want to enforce a coding standard.	GNU Lesser General Public License	http://checkstyle.sourceforge.net/index.html
19	Metrics	Provides metrics calculation and dependency analyzer plugin for the Eclipse platform. Measure various metrics with average and standard deviation and detect cycles in package and type dependencies and graph them.	Common Public License 1.0	http://metrics.sourceforge.net/
20	JDepend	Traverses Java class file directories and generates design quality metrics for each Java package. JDepend allows you to automatically measure the quality of a design in terms of its extensibility, reusability, and maintainability to manage package dependencies effectively.	BSD License	http://clarkware.com/software/JDepend.html
21	PMD	PMD scans Java source code and looks for potential problems like: • Possible bugs - empty try/catch/finally/switch statements • Dead code - unused local variables, parameters and private methods • Suboptimal code - wasteful String/StringBuffer usage • Overcomplicated expressions - unnecessary if statements, for loops that could be while loops • Duplicate code - copied/pasted code means copied/pasted bugs	BSD License.	http://pmd.sourceforge.net/
22	FindBugs	Uses static analysis to look for bugs in Java code	GNU Lesser General Public License	http://findbugs.sourceforge.net/index.html

ACES Open Source Software				
The following Open Source Software titles are used as part of ACES System in web based applications				
Item #	**Product Name**	**Description**	**License Type**	**Source**
23	jQuery Cross Slide	jQuery plugin that implements common slide-show animations in Javascript, traditionally only available via Adobe Flash or other proprietary plugins. Cross Slide builds upon jQuery's animation facility, so it is as portable across browsers as jQuery itself (that is, a lot!).This plugin will be used on the Washington Connection home page to rotate/slide the pictures.	MIT / GPL License	http://tobia.github.com/CrossSlide/
24	jQuery Flexigrid	Lightweight but rich data grid with re-sizable columns and a scrolling data to match the headers 1. Resizable columns 2. Resizable height and width 3. Sortable column headers 3. Cool theme 4. Can convert an ordinary table 5. Ability to connect to an Ajax data source (XML and JSON[new]) 6. Paging 7. Show/hide columns 8. Toolbar (new) 9. Search (new) 10. Accessible API This plugin will be used in all the Summary Pages. The plugin loads the page faster when compared to JQuery	MIT / GPL License	accordion.http://flexigrid.info/
25	JQuery Wijmo Tooltip	JQuery wijtooltip widget allows showing a popup tooltip or an overlay that provides information about a target element in a callout or small box. Embed any HTML, images, and text to create a fully customized tooltip. This plugin will be used on the Washington Connection pages wherever the tooltip is required. This will be used more like help feature on the site.	GPLv3 License	http://wijmo.com/wiki/index.php/Tooltip
26	Spring Data-JPA	Spring Data JPA - Simplifies the development of creating a JPA-based data access layer	Apache License, Version 2.0	http://www.springsource.org/spring-data/jpa

ACES Open Source Software				
The following Open Source Software titles are used as part of ACES System in web based applications				
Item #	**Product Name**	**Description**	**License Type**	**Source**
27	Apache Santuario for Java	The Apache SantuarioTM project is aimed at providing implementation of the primary security standards for XML XML-Signature Syntax and Processing. XML Encryption Syntax and Processing. The Apache XML Security for Java library supports XML-Signature Syntax and Processing, W3C Recommendation 12 February 2002 and XML Encryption Syntax and Processing, W3C Recommendation 10 December 2002.	Apache License, Version 2.0	http://santuario.apache.org/javaindex.html
28	Bouncy Castle	Bouncy Castle Crypto APIs for Java is a lightweight cryptography API, A provider for the Java Cryptography Extension and the Java Cryptography Architecture. Bouncy Castle enables AES-GCM encryption. Bouncy Castle API is widely used as based JDK and does not provide capabilities for algorithms like AES-GCM.	MIT License http://opensource.org/licenses/mit-license.php	http://santuario.apache.org/javaindex.html
29	HDIV	HDIV as a Java Web Application Security Framework. HDIV extends web applications behavior by adding Security functionalities, maintaining the API and the framework specification.	Apache License, Version 2.0	http://www.hdiv.org/
30	dom4j	Open source Java library for working with XML, XPath and XSLT using the Java Collections Framework and with full support for DOM, SAX and JAXP. Copyright by MetaStuff Ltd. Used as part of gradle package.	BSD	http://www.dom4j.org/
31	Apache Ant	Java build and package utility used to manipulate files for aces.online code promotes and distributions, used as part of gradle package	Apache License, Version 2.0	

ACES Open Source Software				
The following Open Source Software titles are used as part of ACES System in web based applications				
Item #	**Product Name**	**Description**	**License Type**	**Source**
32	Jaxen	Jaxen is an open source XPath library written in Java. It is adaptable to many different object models, including DOM, XOM, dom4j, and JDOM. Is it also possible to write adapters that treat non-XML trees such as compiled Java byte code or Java beans as XML, thus enabling you to query these trees with XPath too. Java Xpath library used by MotioCI for the version control and testing product for IBM Cognos	Custom license located at http://jaxen.org/license.html	http://jaxen.codehaus.org/
33	commons-collections	Java collection framework extension tool used by MotioCI for the version control and testing product for IBM Cognos also used as part of gradle package	Apache License, Version 2.0	http://commons.apache.org/
34	commons-io	Collection of I/O utilities used by MotioCI for the version control and testing product for IBM Cognos. Also used by the testing automation framework when searching for files created on a given date. Used as part of the gradle package.	Apache License, Version 2.0	http://commons.apache.org/
35	commons-lang	Java.lang support tool used by MotioCI for the version control and testing product for IBM Cognos. Also by the testing automation framework when parsing date entries received from the user. Also used as part of gradle package	Apache License, Version 2.0	http://commons.apache.org/
36	Maven	Provides a uniform build system for Java projects and is packaged with m2e. Used as part of the gradle package.	Apache License, Version 2.0	http://maven.apache.org/
37	Gradle	Used for simplifying java projects automation build process and easy to manage the subprojects and libraries dependencies.	Apache License, Version 2.0	http://www.gradle.org

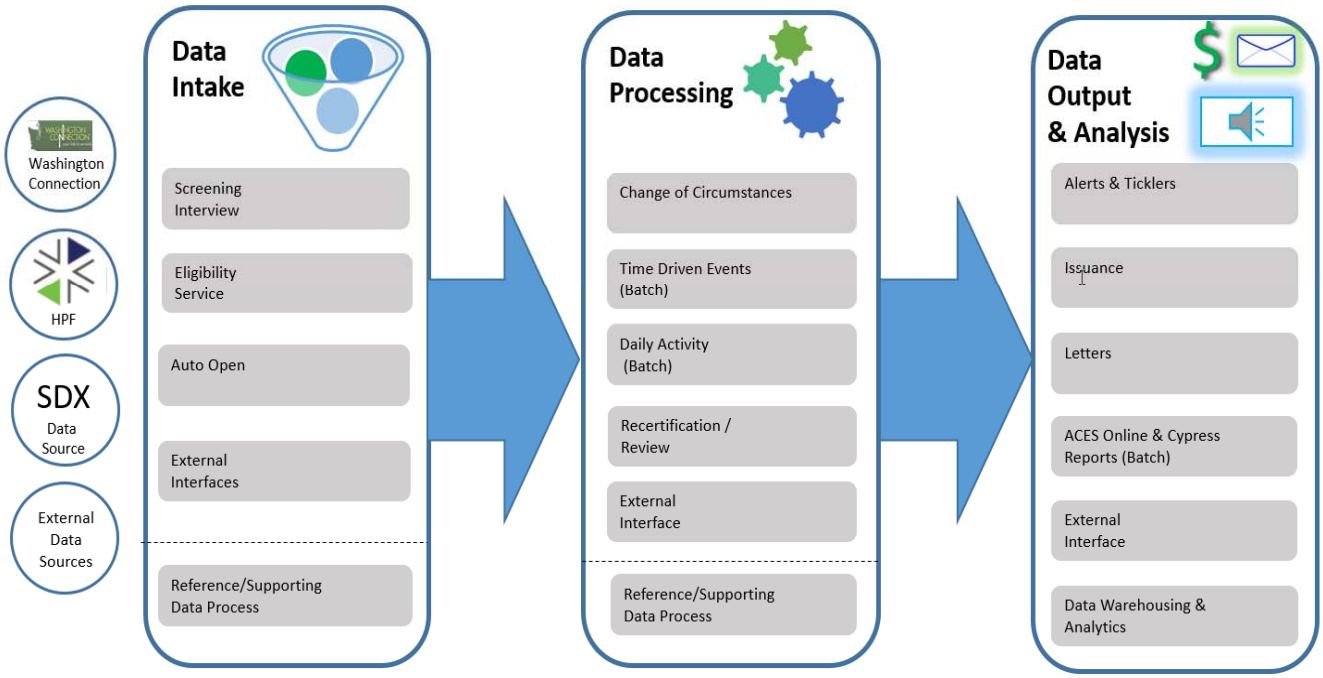
ACES Open Source Software				
The following Open Source Software titles are used as part of ACES System in web based applications				
Item #	**Product Name**	**Description**	**License Type**	**Source**
38	SonarQube	Used for analyzing and managing code quality. It covers the 7 axes of code quality - architecture & design, comments, coding rules, potential bugs, complexity, unit tests, duplications.	LGPL version3	http://www.sonarqube.org
39	D@RE	Controller-based Data at Rest Encryption (D@RE), which encrypts stored data as it is written to disk. Whether drives are lost, stolen, or failed, unauthorized access is prevented by rendering the drive unreadable without the encryption key within the storage system. In addition to peace of mind, D@RE offers additional benefits including regulatory compliance, secure decommissioning, and the possibility to eliminate the need for physical drive shredding.	OSS	https://www.emc.com/collateral/white-papers/h15090-dell-emc-unity-data-at-rest-encryption.pdf

1.1.1 Supported Databases

ACES Data (Production)	
These are current environment databases.	
# Core Databases	154
# Copy for Analysis	36 *(These are copies made once a week of the major databases for analysis purposes)*
Core Database Size	461 GB
Copy for Analysis Size	377 GB
DB2 Core Databases (ACES/ESERV/WACONN)	
# Databases	30
# Tables	575
# Views	108
# Stored Procedures	4
# Triggers	137
These are current environment databases.	
# Databases	2
# Tables	138
# Views	3
# Stored Procedures	4
# Triggers	12
DB2 Database Size (Includes DB2 Core, DB2 ODS & Data Warehouse)	
Total Size	1975 GB
VSAM	

# Files	65
Total Size	7.2 GB
Sequential Files	
# Files	12847
Total Size	176 GB
PDS Files	
# Files	408
Total Size	14 GB
z/VM Linux Disk	
# Disk Volumes	46
Total Size	1497 GB

ACES Data (Non-Production)	
These are current environment databases.	
# Core Databases	984
Core Database Size	42 GB
DB2 Core Databases (ACES/ESERV/WACONN)	
# Databases	189
# Tables	3450
# Views	768
# Stored Procedures	24
# Triggers	822
These are current environment databases.	
# Databases	12

# Tables	828
# Views	18
# Stored Procedures	24
# Triggers	72
These are current environment databases.	
# Databases	12
# Tables	1152
# Views	1152
# Stored Procedures	0
# Triggers	0
DB2 Database Size (Includes DB2 Core, DB2 ODS & Data Warehouse)	
Total Size	101 GB
VSAM	
# Files	450
Total Size	10.6 GB
Sequential Files	
# Files	23771
Total Size	23.1 GB
PDS Files	
# Files	1948
Total Size	70 GB
These are current environment	
# Disk Volumes	137
Total Size	4284 GB

ACES Data Lifecycle High Level Processes