

## Trademark Next Generation Fiscal Year 12 Projects Overview

Cloud Computing	TSDR FY12	Enhancements will be made to TSDR 1.0 to display all USPTO data/documents related to a single trademark property in one consolidated view.
Infrastructure Improvements	Authentication Authorization and SSO	Using the recommendations from the FY11 AASSO project, this project will procure, deploy and configure the tools necessary to manage the Authentication, Authorization and Single-sign on of the TM NG.
Separation & Virtualization	FY12 TM NG Separation and Virtualization	The scope of this project is to separate Trademark AIS to a TM dedicated server and virtualize where possible.
TMNG Data Services Program	Trademarks Records Management (TRM)	Development of the TRM system using defined business tools, UI and Cloud technologies.
TMNG Web and Business Services Program	TM Reporting and DataMart	The TM Reporting and DataMart project will provide the access layer for Trademark Next Generation and legacy system data stores. It will add flexibility in reporting and data access by different trademark business units, and will ultimately result in lower costs for the creation of custom reports and data views going forward by getting report creation tools into the hands of USPTO business users.
	Web and Business Services	To develop the web and business services needed to automate and support the capabilities identified in the 17 Trademarks value streams, as defined in the Trademarks Priority List.

<b>Technology Need</b>	<b>Solution</b>	<b>Emerging/Approved</b>
1 Operating system	Red Hat Enterprise Linux 6.x	Approved
2 File system	ext4	Approved
3 Virtualization (type 1 hypervisor)	Red Hat Enterprise Linux 6.x: KVM	Approved
4 Server provisioning	RHN Satellite 5.x	Approved
5 Virtualization management	RHEV-M 2.x	Approved
6 Load balancer	IBM Edge Server 7.	Approved
7 Physical Servers	Dell R910	Approved
8 Application server	Jboss EAP	Approved
9 Web server	Jboss EAP	Approved
10 Java servlet/JSP container	Jboss EAP	Approved
12 Logging	log4j with Splunk and/or Apache Chainsaw	Need to present Bus Case to the EAGB
13 Database	Oracle r11 or MySQL Cluster Carrier Grade Edition 7.1	Emerging (MySQL)
14 Version control	Apache Subversion 1.6.x feeding ClearCase	Emerging
15 Build management	Apache Maven 3.0.x feeding ClearCase	Emerging
16 Continuous integration tool	Hudson 1.39x	Emerging
17 Build artifact repository	Nexus 1.9.x feeding ClearCase	Emerging
18 Development application framework	Spring	Approved
19 Development application framework	Spring Security, Jersey	Need to present to the EAGB
11 Object-relational mapping & persistence framework	IBatis	Need to present Bus Case to the EAGB
Development IDE	Eclipse	Approved
14 JavaScript toolkit	Dojo 1.6.x	Emerging
1 XML Management	TBD	TBD
15 Primary Deployment language	Java 1.6	Approved
16 Enterprise service bus (ESB)	Jboss ESB as part of Jboss SOA-P 5.1	Emerging (we will need to present our Bus Case)
17 Rules engine	Currently building business case	TBD
18 Workflow management	Currently building business case	TBD
19 Content Management	Alfresco Enterprise ver 4.x	Presented Business Case to the EAGB
13 Search engine	TBD; currently building business case	TBD
Analytics Reporting	Crystal Reports 11, BIIRT 2.5, Business Objects XI 4.0	Approved