ITS Technical Services and Standards Overview
Exhibit 1 – Technology Services Overview

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1. Introduction

The Office of Information Technology Services (ITS) provides infrastructure, platform and shared services components used to build, configure, and customize proposed solutions. A proposed solution must use the supported enterprise shared service platforms and components whenever practical. ITS enterprise technologies are available for the successful bidder to build and configure a solution that meets business requirements defined by the New York State customer agency. All builds and configurations must comply with NYS Information Technology Policies, Standards, and Best Practice Guidelines. These guidelines can be found on the ITS website at https://www.its.ny.gov/tables/technologypolicyindex.

Using NYS ITS enterprise shared services and components is the preferred architecture; however, other products may be proposed based on potential integration advantages and/or alignment with the ITS enterprise strategic direction and with approval by the New York State Chief Technology Officer.

This document does not represent an exhaustive list of supported ITS products and services and is subject to change.
2. ITS Managed Services – Infrastructure

2.1 Supported Servers and Database

Virtual servers to support multiple sized workloads running current supported operating systems and application servers. Service features include configuration of memory and CPU based on tiers (small, medium, large), managed network, system monitoring, security, and capacity planning:

Operating Systems:

- Red Hat Enterprise Linux (RHEL)
- Microsoft Windows Server
- IBM AIX (Advanced Interactive eXecutive)

Application Servers:

Preferred Java JEE application servers for custom JEE development:

- Red Hat JBoss EAP

Preferred Java JEE application servers for vendor specific implementations:

- IBM Websphere
- Oracle WebLogic Server

Preferred Microsoft .NET application servers for customer and vendor specific implementations:

- Microsoft .NET

Database Servers:

Managed relational database services include database support and physical database design in addition to infrastructure support. The service targets OLTP structured data workloads. Supported technologies include current releases of:

- Oracle Database Server
- Microsoft SQL Server
- IBM DB2 LUW
2.2 Example Application Hosting Stacks

<table>
<thead>
<tr>
<th>Web Server</th>
<th>Application Server</th>
<th>Database</th>
<th>Software Workloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>RedHat HTTP</td>
<td>RedHat JBoss</td>
<td>Oracle DB / MS SQL / IBM DB2 LUW</td>
<td>Custom Java J2EE or COTS*</td>
</tr>
<tr>
<td>Microsoft IIS</td>
<td>Microsoft .NET</td>
<td>MS SQL</td>
<td>Custom.NET or COTS</td>
</tr>
<tr>
<td>IBM HTTP</td>
<td>IBM Websphere</td>
<td>Oracle DB / MS SQL / IBM DB2 LUW</td>
<td>COTS</td>
</tr>
<tr>
<td>Oracle HTTP</td>
<td>Oracle WebLogic</td>
<td>Oracle DB / MS SQL</td>
<td>COTS</td>
</tr>
</tbody>
</table>

*Note: COTS workload includes packaged applications that prefer configuration over custom build.*

3. ITS Managed Services – Enterprise Software

3.1 Identity Management

User authentication is available using ny.gov ID and Active Directory.

- Agency (internal) user authentication must leverage Active Directory Federation Services (ADFS).
- External users and citizens (business entities and public) that are not integrated through ADFS will be supported using ny.gov ID accounts. NY.gov ID is an online service that allows you to use your user ID and password to sign in securely to NY.gov ID participating government online services.

3.2 API Management

NYS ITS API Gateway Service makes the process of building, publishing and operating APIs significantly simpler and more consistent. External facing interfaces must use, and Internal interfaces may use, when practical.

- SOA Akana
3.3 Managed File Transfers

NYS ITS Managed File Transfer Service provides a centrally managed, secure and dependable file transfer with internal and external partners. It helps NYS Agencies avoid the risk and operational issues that can result from using loosely controlled file-transfer servers.

- Fixed File Gateway: IBM Sterling
- Large Ad-hoc: IBM Aspera

3.4 Business Process Management (BPM)

BPM offers an agile, scalable business model that provides agencies to respond to dynamic demands more quickly with increased productivity and accelerated innovation.

- IBM BPM Advanced Edition

3.5 Document Management

NYS ITS Enterprise Content Management Service provides a set of technical capabilities that can be leveraged by customer agencies to simplify the integration of document management requirements:

- IBM FileNet

3.6 Business Intelligence and Analytics

Reporting, Business Intelligence and Data Analytics capabilities is provided through following set of supported technologies:

- IBM Cognos (preferred)
- Tableau (preferred)
- OBIEE
- SAS

3.7 Customer Correspondence

Document generation and correspondence with delivery of the documents to a designated output channel is supported by ITS through services based on the project system design specifications.
• OpenText Exstream

3.8 Geographic Information Systems (GIS)

The statewide GIS platform provides capability to share and discover geographic information, create and manage state geographic assets, visualize and analyze geospatial information, and collaborate geographic data in real-time. It is used to find, create and share maps to meet analytical requirements. All maps and APIs should go through the standard NYS offering rather than Google, Bing or other industry sources. GIS services such as map and feature services is exposed to service consumers as a RESTful end-point.

• ESRI ArcGIS