Part Two: StratML Toolkit & StratML Cloud

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Introduction

StratML is an XML language used to capture strategy information of an organization in an open, standard, machine-readable format. The vision of StratML is to help lead to "***A worldwide web of intentions, stakeholders, and results***." This report is a series of diagrams that illustrate how StratML can be integrated into an existing systems architecture.

The report should serve as a visual cue and starting-point for systems architects. It serves as a follow-up to the previous report by Russell Ruggiero entitled "Part One: StratML Toolkit & StratML Cloud" (see References), which explains in detail where and how StratML can be implemented in a variety of scenarios.

Foundation / Summary

There are numerous benefits to having an open, standard machine-readable format like StratML for capturing organizational strategy information, in both the private and public sector. These include clarified communication between stakeholders, translation between disparate data formats, improved coordination between agencies, and discovery of services in an open marketplace. We expound upon these in the report co-written with Russell Ruggiero: "StratML: Public and Private Sector Uses" (see References).

In this paper, we'll focus on how to implement StratML toolkit adaptors in a systems environment, through a series of diagrams. These depictions can bring clarity to the minds of those considering implementing StratML on how to enable StratML in their workflow. Four diagrams are presented below.

Diagrams

StratML Toolkit Diagram
Unidirectional Dataflow

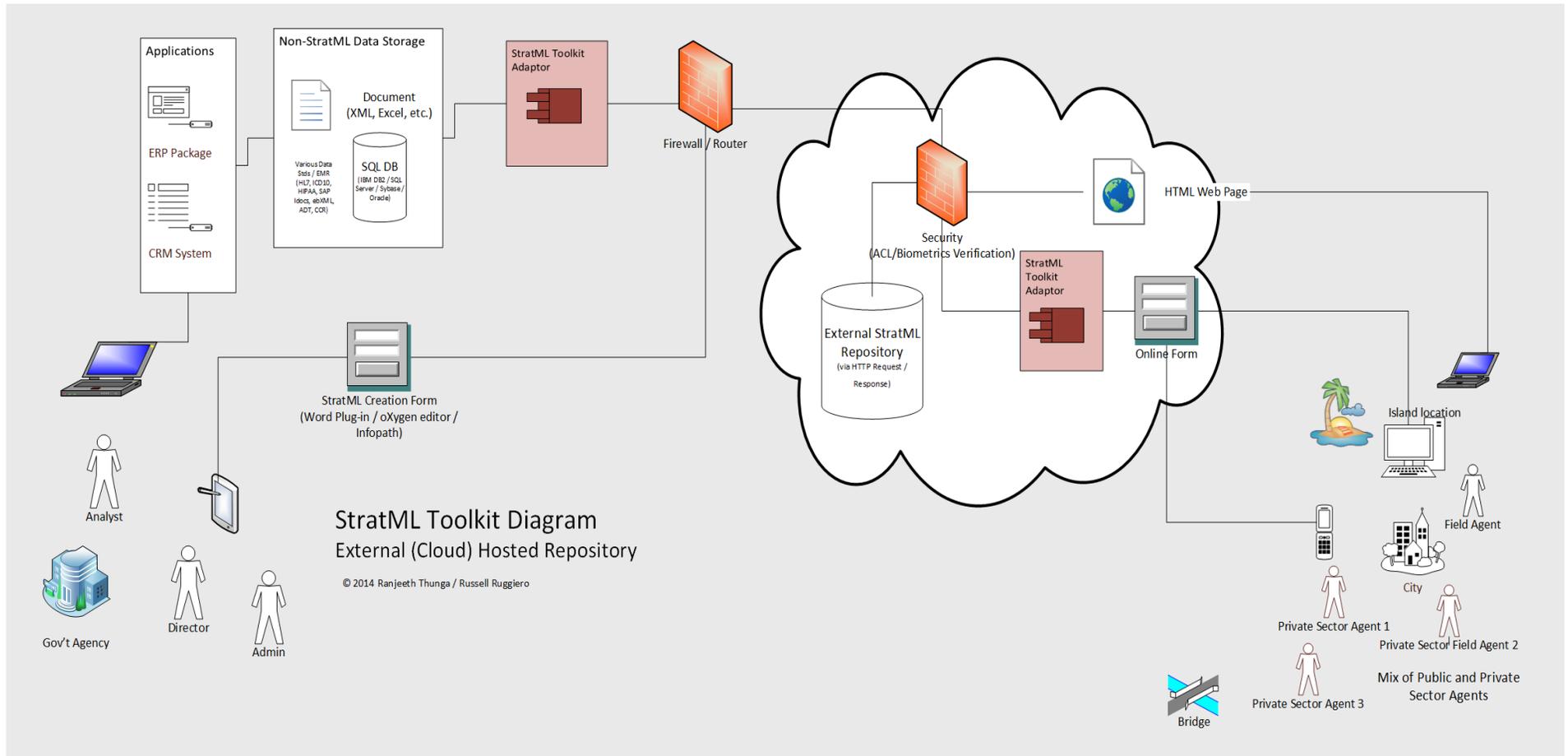©2014 Ranjeeth Thunga / Russell Ruggiero
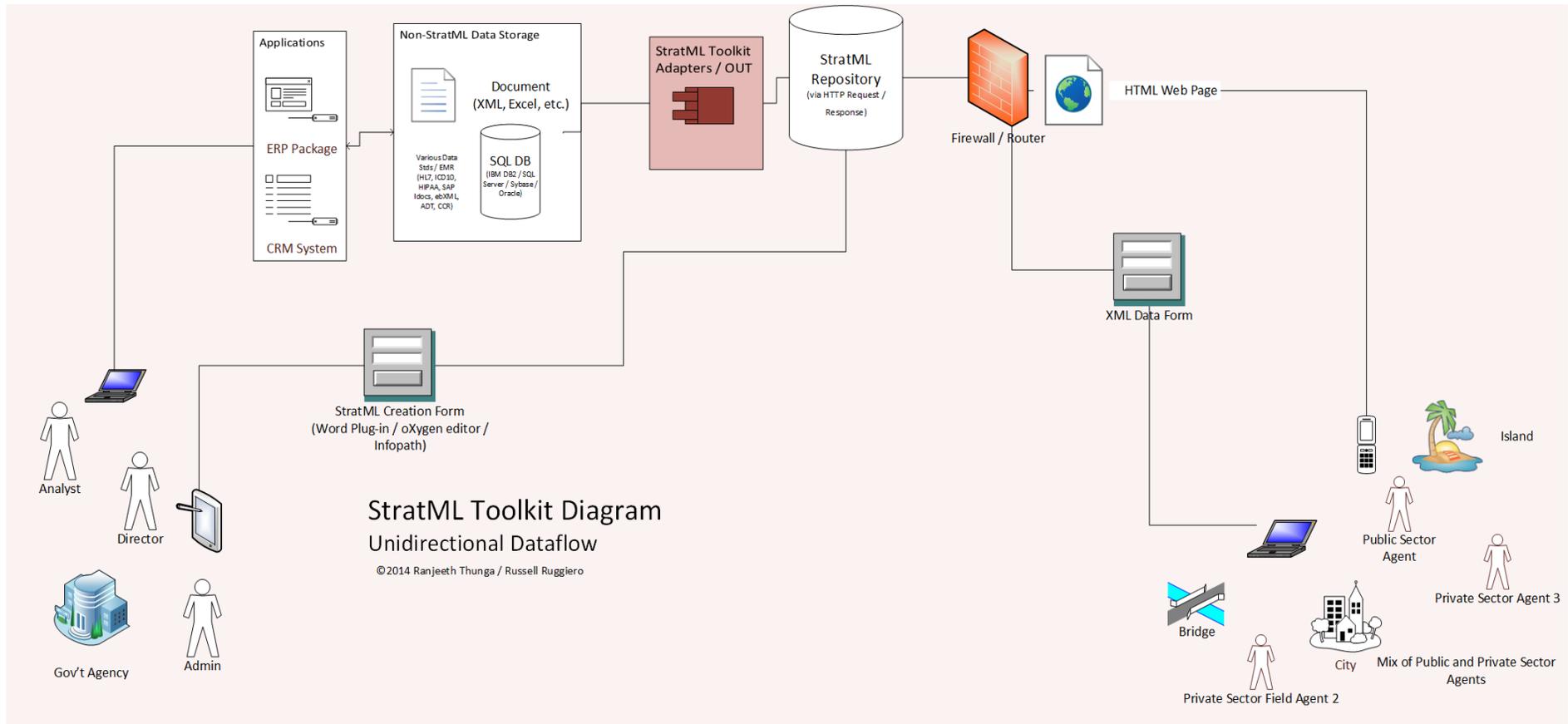
Unidirectional Information Flow: The first diagram depicts a flow of data from persons in an agency to the outside world. The data in their environment is translated into StratML format from their current documents via a StratML Toolkit Adaptor. Their current infrastructure, including the applications they use, and the databases they have, are completely intact.

StratML Toolkit Diagram
Bidirectional Dataflow

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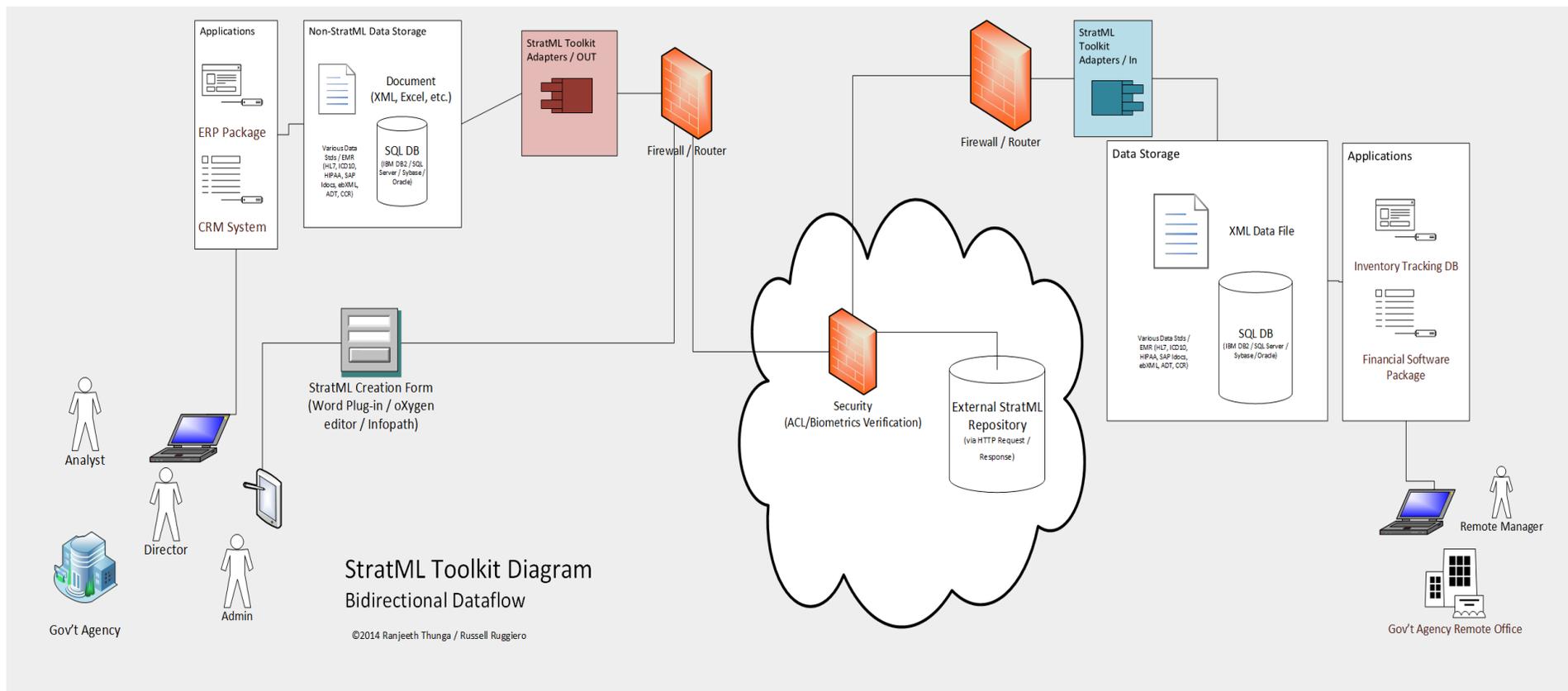
Bidirectional Information Flow: The second diagram depicts a flow of information from an agency to a remote office, via the cloud. It follows a similar workflow as the earlier diagram. However, here we depict *another* StratML Toolkit Adaptor (inbound) that translates the StratML data into the remote office's preexisting data format, through its preexisting applications.
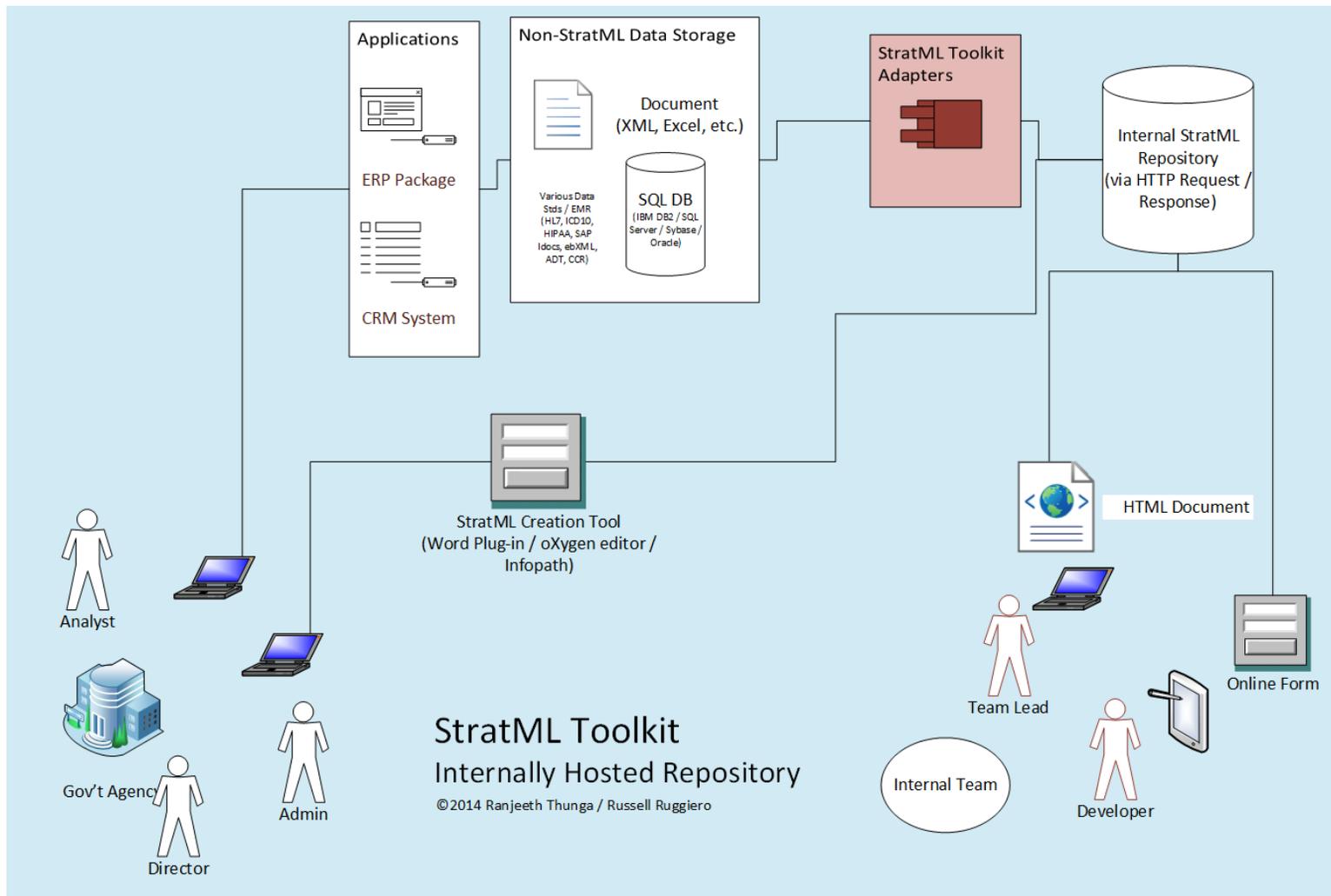
Internal StratML Repository: This diagram depicts an internally hosted StratML repository which hosts the strategic agreements between StratML partners within the same environment. Security measures and strategic agreements are maintained by the agency itself.

Applications
- ERP Package
- CRM System

Non-StratML Data Storage
Document (XML, Excel, etc.)
Various Data Stds / EMR (HL7, ICD10, HIPAA, SAP Idocs, ebXML, ADT, CCR)
SQL DB (IBM DB2 / SQL Server / Sybase / Oracle)

StratML Toolkit Adaptor

Firewall / Router

Security (ACL/Biometrics Verification)

HTML Web Page

StratML Toolkit Adaptor

External StratML Repository (via HTTP Request / Response)

Online Form

Analyst

Gov't Agency

Director

Admin

StratML Creation Form (Word Plug-in / oXygen editor / Infopath)

StratML Toolkit Diagram
External (Cloud) Hosted Repository

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Island location

Field Agent

City

Private Sector Agent 1

Private Sector Field Agent 2

Bridge

Private Sector Agent 3

Mix of Public and Private Sector Agents

External (Cloud) StratML Repository: This diagram depicts a cloud hosted StratML repository, which contains strategic agreements between StratML partners and references to StratML files hosted on the Web. Security measures and strategic agreements are maintained by an independent party.

References

StratML
http://xml.fido.gov/stratml/

DNAOS-powered StratML Portal
http://stratml.hyperbase.com

StratML: Private & Public Sector Uses report by Ranjeeth K. Thunga & R. Russell Ruggiero
http://xml.fido.gov/stratml/references/StratML-PrivatePublicSectorUses.pdf

Part One: StratML Toolkit & StratML Cloud by R. Russell Ruggiero
http://xml.fido.gov/stratml/references/StratMLToolkitCloud.pdf

AIIM
http://www.aiim.org/

DHS
http://www.dhs.gov/

DOD
http://www.defense.gov/

EPA
http://www.epa.gov/

EPA Office 9 (Pacific Southwest)
http://www2.epa.gov/aboutepa/epa-region-9-pacific-southwest)

EPA Emergencies & Spills
http://www.epa.gov/region9/cleanup/emergency/

EPA Region 9 Oil Program Contacts
http://www.epa.gov/region9/disaster/oilpp/index.html

EPA Oil Spills
http://www.epa.gov/oilspill/

IBM DB2
http://www-01.ibm.com/software/data/db2/

Microsoft SQL Server 2012
https://www.microsoft.com/en-us/sqlserver/default.aspx

OASIS
https://www.oasis-open.org/

Oracle Database 12c
http://www.oracle.com/us/corporate/features/database-12c/index.html

Sybase Adaptive Server Enterprise
http://www.sybase.com/products/databasemanagement/adaptiveserverenterprise

W3C
http://www.w3.org/

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