

Integrating  
Microsoft SQL  
Reporting  
Services with



# What is SSRS?

- Reporting Services is a server-based reporting platform that provides comprehensive reporting functionality for a variety of data sources.
- Includes a complete set of tools for you to create, manage, and deliver reports.

# What is SSRS?

- Publish reports, schedule report processing, or access reports on-demand.
- Variety of viewing formats, export reports to other applications such as Microsoft Excel, and subscribe to published reports.
- License included with MS SQL Standard

# Report Development

- Report Development
  - Visual report design
  - Report Features
    - Grouping
    - Sorting
    - Filtering
    - Drill-Down and Drill-Through
    - Charting
- XML-based Report Files (.rdl)

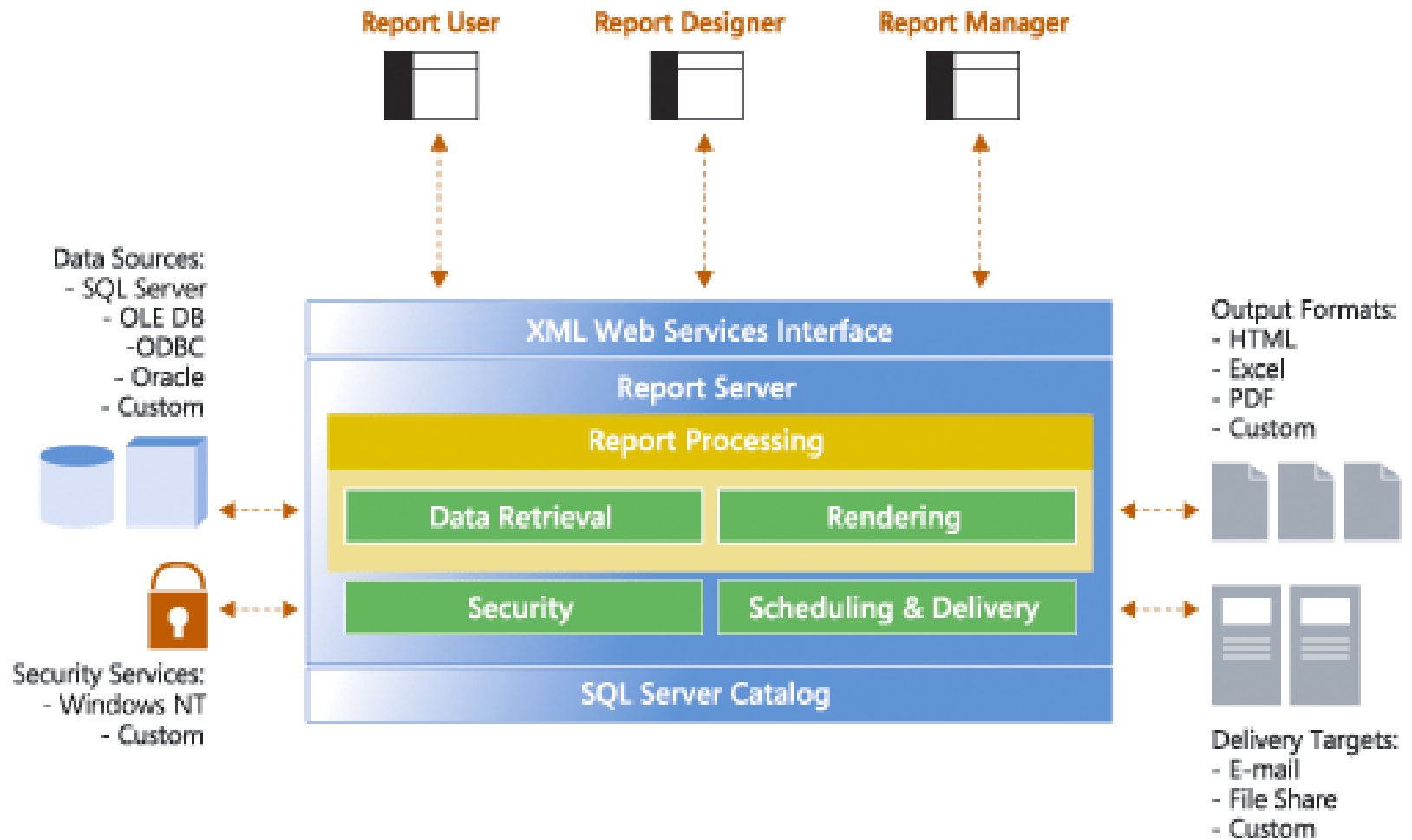
# Report Development

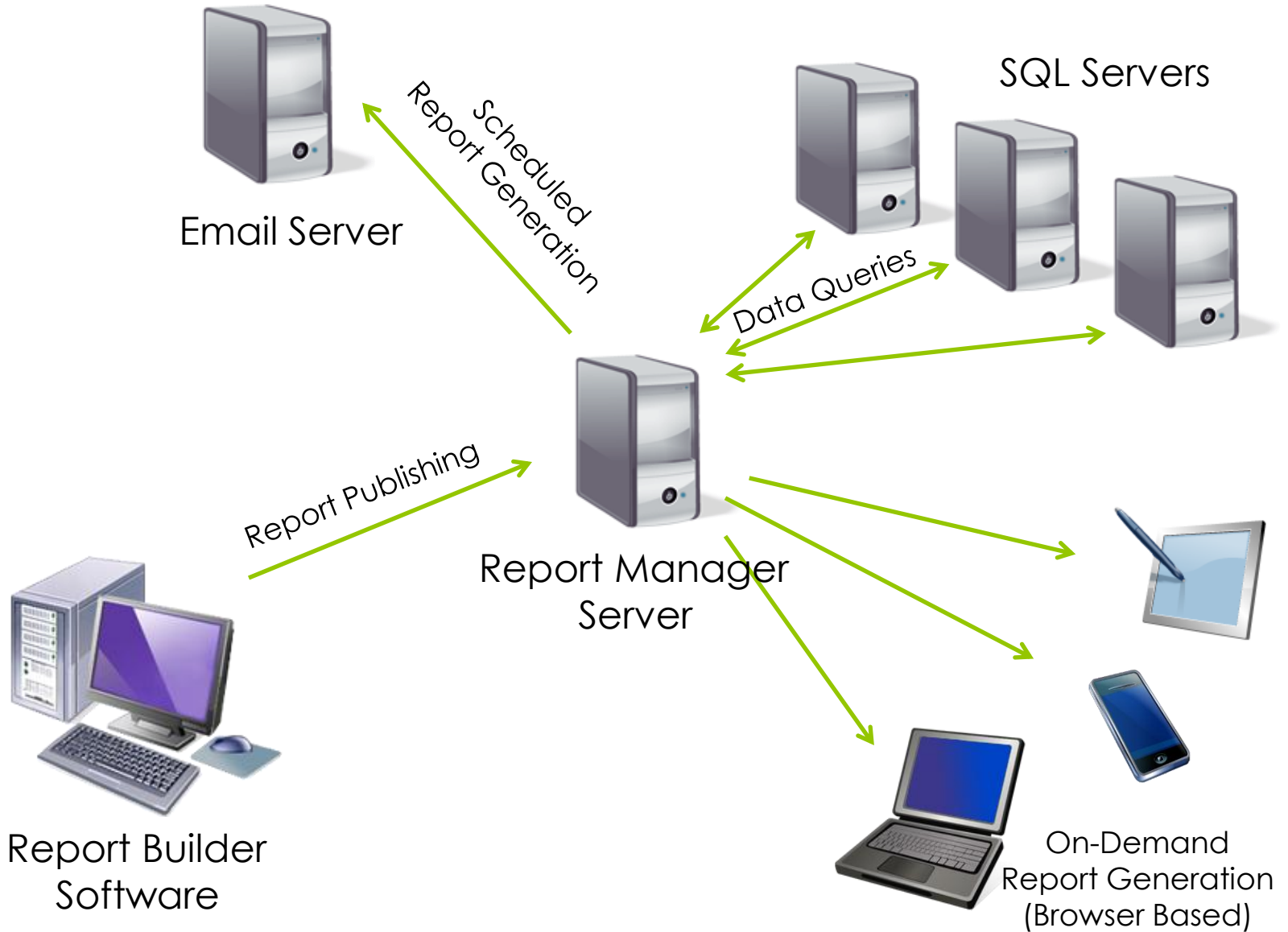
- ▶ Report Types
  - Table
  - Matrix
  - Charts
- ▶ Report output:
  - Report Viewer (web site)
  - Page-based (HTML, TIFF, PDF)
  - Application integration (Web / Windows Forms)
- ▶ Export Formats:
  - Adobe PDF, XML, Microsoft Excel, CSV, TSV

# Data Sources

- Any OLEDB / ODBC-compliant data source
- Relational
  - SQL Server
  - Oracle
  - MS Access
  - MySQL
- OLAP / Multi-Dimensional
  - SQL Server Analysis Services
- XML, Excel, CSV, TSV, etc.

## REPORTING SERVICES ARCHITECTURE







# Usage Examples

- Exception Reporting – What data are we NOT capturing.
  - Show assets with key fields not populated
  - Show hydrants not on a flushing or maintenance route
- Reduce human error – Automated report production and delivery
  - Fire Department receives daily report of hydrants flagged out-of-service
- Visual Representation
  - Dashboards or graphical reports

# Benefits

- Role/Permission based access to reports
  - Integrated with Active Directory
- Connects to any SQL Data source
  - Pull data from any SQL database, not just from Lucity.
  - Present data from a single data source or joined from multiple data sources

# Benefits

- Mobile
  - Browser-based and can be viewed on mobile devices (May require 3<sup>rd</sup>-party browser. e.g. Firefox)
- Hierarchical Navigation
  - Organize reports by department
- Great for custom field-driven reports (e.g. Hydrant flushing problem flags)

# Caveats

- Some features require SQL Server Enterprise or Business Intelligence edition.
  - Data driven report subscriptions
  - Scale-out deployments (Web Farms)
- SQL Server Web & Express Edition (with Advanced Tools) support limited feature set.
- See <http://msdn.microsoft.com/en-us/library/cc645993.aspx#Reporting> for details

# Demonstration

# Q&A

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# References

- [http://technet.microsoft.com/en-us/library/cc645993\(v=sql.105\).aspx#Reporting](http://technet.microsoft.com/en-us/library/cc645993(v=sql.105).aspx#Reporting)
- [http://technet.microsoft.com/en-us/library/cc645993\(v=sql.110\).aspx](http://technet.microsoft.com/en-us/library/cc645993(v=sql.110).aspx)
- <http://www.mssqltips.com/sqlservertip/2615/creating-a-ssrs-report-using-a-mysql-data-source/>
- <http://msdn.microsoft.com/en-us/library/cc645993.aspx#Reporting>