

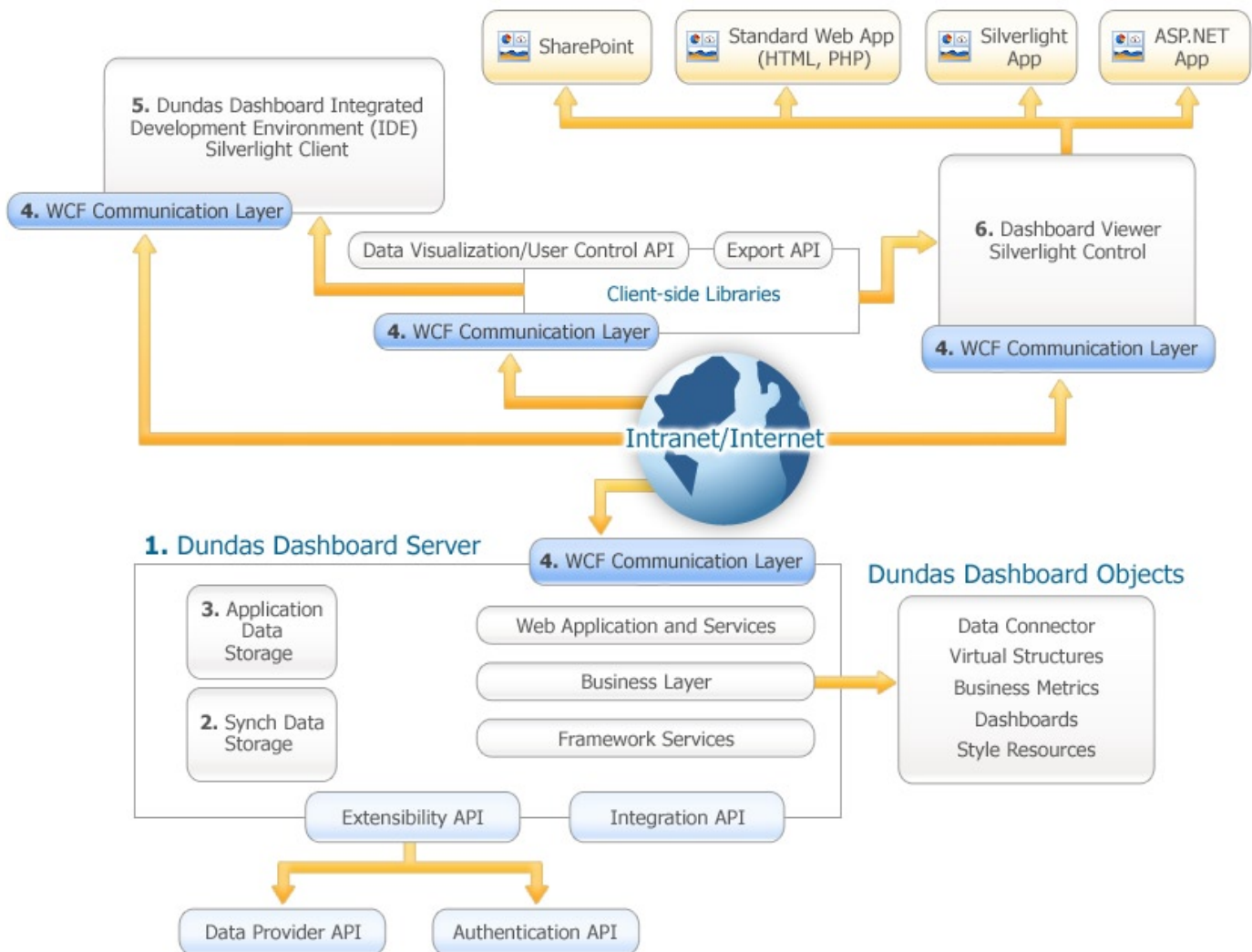
Dundas Dashboard High-Level Architecture

Introduction

Dundas Dashboard (DD) is a turnkey dashboard framework that enables various roles to collaborate on a dashboard initiative - including business analysts, business users, database administrators and IT staff. In addition, Dundas Dashboard is a highly extensible platform for those who need to customize the solution to specific requirements. This document will go over the high-level architecture of Dundas Dashboard and areas where you can extend the product.

High-Level Architecture

Dundas Dashboard is a server-client application. All application information (DD objects) is stored on the server side in the application database and all user interactions happen on the client side in an integrated development environment (IDE). In addition, dashboards created in Dundas Dashboard can be access and displayed via our Silverlight viewer control. With this architecture, typically a Windows web server is needed for the DD server side and any web browser that runs Silverlight (Safari for Mac OS, IE, Firefox) is required for the client.





1. Dundas Dashboard Server

The server is used to link the application to the client (IDE and Silverlight viewer control). In addition, it manages various services including:

- Notifications (new to V2.5)
- Annotations
- Project object import/export

2. Synch Database

This stores the cached data from data sources if it has been configured to do so. Data from flat file data sources are automatically cached to increase data retrieval and/or performance.

3. Application Database

This database stores the configuration settings of the application and all the objects including business metrics and dashboards created via the DD IDE client.

4. WCF Communication Layer

Dundas Dashboard leverages Windows Communication Foundation (WCF) to transport data between the server and the client.

5. Dundas Dashboard Integrated Development Environment (IDE)

The IDE allows various personnel (business analysts, database administrators) to collaborate in one portal to build dashboards. This is where staff would connect to data sources, define business metrics and develop the dashboard systems. By accessing the portal via the Silverlight client, there is no need to install any software on the client machine (except for Silverlight).

6. Dundas Dashboard Viewer Control

This control lets users view the dashboards created with Dundas Dashboard without having to access the IDE. This allows for various types of integration which will be covered later. In addition, the viewer control allows users to:

- Manage their views of their dashboards with bookmarks
- Set notifications on visualizations
- Annotate business metrics
- Export data out into various formats

Dundas Dashboard API

The API that comes with Dundas Dashboard allows developers to extend the product in many areas. Here's a quick summary of the APIs we provide:

- Data Provider API – create new data connectors to SQL-compliant databases and other type of flat file sources such as web services
- Authentication API – integrate into other authentication systems such as Active Directory
- Data Visualization/User Control API – integrate third-party Silverlight controls into the dashboard-development process
- Export API – integrates third-party export libraries for use by dashboards

For more details, you can go to our [API section](#) on our website.

Dundas Dashboard Integration

Dundas Dashboard Viewer Control

The Dundas Dashboard viewer control allows published dashboards to be integrated and viewed in other applications. Other applications include:

- SharePoint
- Silverlight applications
- Standard web-based applications that supports HTML markup
- ASP.NET applications

Out of the box, Dundas Dashboard provides a default ASP.NET page for standalone viewing of published dashboards. For more details, go to the [integration section](#) of our website.

Dundas Dashboard Integration API

On the server side, you can access the platform for integration purposes via the Integration API. This API allows you to programmatically do the following:

- Login / logout of Dundas Dashboard
- Retrieve the list of available dashboards for the logged-in user