NetView Software Development Kit

Technical Overview

Why an SDK?

The NetView Software Development Kit (SDK) provides your organization the ability to customize and extend the NetView Data Fusion and Display environment.

Using the Application Programming Interface (API) included with the SDK, software engineers can develop custom GUI displays and access the federated data structure for special processing of measurements.

The SDK can dramatically reduce your IRIG 106 Chapter 10 integration process and make it easier to keep up with organization-specific requirements as well as the latest release of IRIG 106 Chapter 10.

What is Included?

The NetView SDK includes the following components.

Display API

The API consists of the host NetView application, core NetView plugin, display and options frameworks, the core NetView measurement service, NetView-specific and IRIG 106 Chapter 10-based repository structures, a library of custom/extended controls, helper classes, and more.

The public interface of the API is contained in multiple .NET assemblies distributed with NetView Developer. Custom applications reference API assemblies only as needed ensuring simplicity and maintainability of your organization's code base.

SDK Programmer's Reference

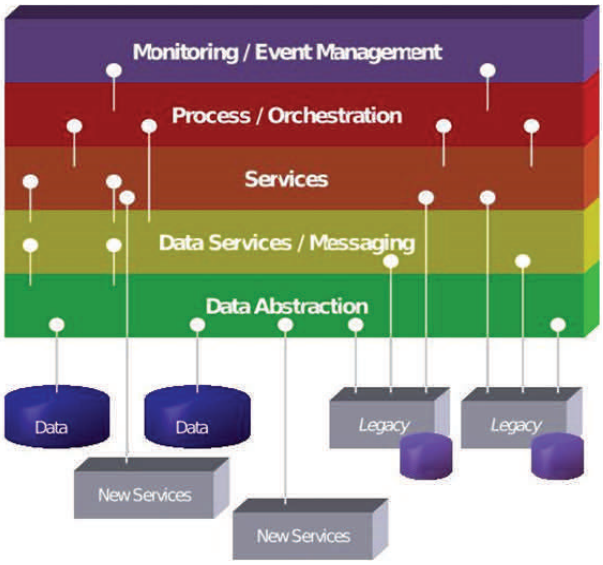
The SDK Programmer's Reference contains a complete listing of C# classes provided by the API, as well as their attributes and methods. The SDK also includes programming samples to quick start your custom development effort. The SDK Programmer's Reference is available from the Windows Start menu after installing NetView Developer.

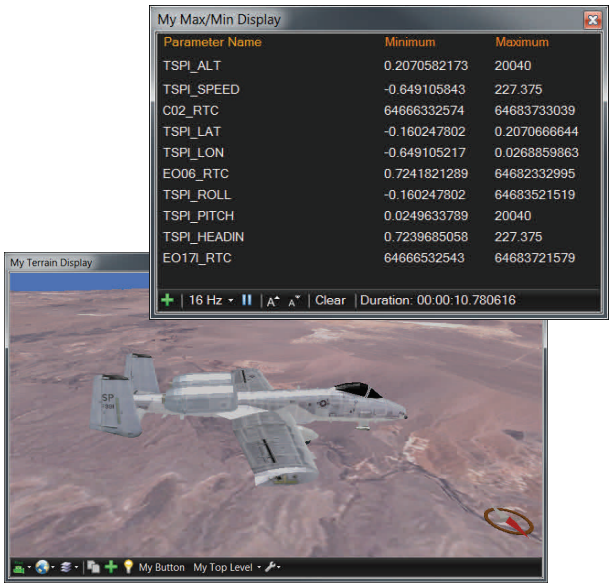
Sample Applications

Located in the NetView Display SDK folder under the installation root, the sample applications clearly demonstrate how to build displays including geo-referenced plugins, charts, and more using the NetView API. The examples are written in C# .NET with Visual Studio 2010, so your organization needs a Microsoft Windows development environment to load, compile and run these applications.

Runtime Components

Custom applications and the NetView API itself are implemented using C# .NET with Visual Studio 2010. Your organization needs a Microsoft Windows development environment to develop, test and deploy custom applications loaded by the NetView application at runtime.





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Supported Customizations

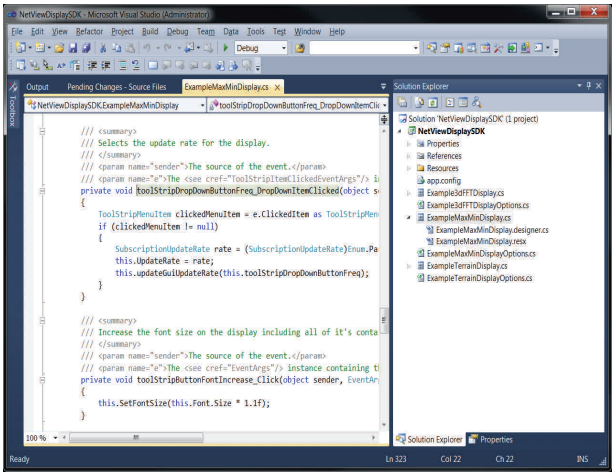
The NetView SDK supports a wide variety of end user customizations while the core application itself decodes, time aligns and processes multiple independent data sources and types in a single real-time processing and display environment. These customizations may include but aren't limited to:

- **Custom Displays & Plugins**
  - Create New Displays
  - Extend Existing Displays
  - Quick Start GUIs & Wizards
  - Service Oriented Plugins
- **Access the Federated Data Structure for All Supported Data Sources**
  - Live/Replay IRIG 106 Chapter 10
  - Streaming Telemetry
  - Telspan DataHUB Device
- **Special Processing of Measurements for All Supported Data Types**
  - Computer Generated Data
  - Time & PCM
  - Mil-Std-1553 & 16PP194
  - Analog & Voice
  - Video & High Speed Dynamic Imagery
  - Ethernet & UART
  - Network XCVR (Embedded Serial)
- **End User Defined Data Conversions & Derived Measurements**
- **Specialized Export & Archive Services**
- **And More...**

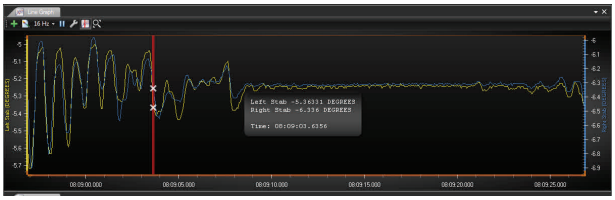
Installation

The NetView SDK is packaged and installed with NetView Developer. The NetView SDK can be installed and deployed to any system running Windows 8, Windows 7, Windows Vista or Windows XP.

The NetView SDK is not a freely redistributable product; duplication of core API files across machines is not permitted. Every machine on which the SDK/API is to be used, either for development purposes or when deployed, must have a valid NetView Developer license provided by Telspan Data.



```
/// <summary>
/// Selects the update rate for the display.
/// </summary>
/// <param name="sender">The source of the event.</param>
/// <param name="e">The <see cref="ToolStripItemClickedEventArgs"/> i
private void toolStripDropDownButtonFreq_DropDownItemClicked(object s
{
    ToolStripMenuItem clickedMenuItem = e.ClickedItem as ToolStripMen
    if (clickedMenuItem != null)
    {
        SubscriptionUpdateRate rate = (SubscriptionUpdateRate)Enum.Pa
        this.UpdateRate = rate;
        this.updateGuiUpdateRate(this.toolStripDropDownButtonFreq);
    }
}
```



Parameter	EU Value
Left Stab	-5.382241
Right Stab	-6.477504
Left Aileron	-0.511616
Left Rudder	-8.638695
Right Rudder	0.123153
Right Aileron	0.520306

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