

ShadowSense Upgrade API

ShadowSense is available as a nugget package, this is required in order to use the upgrade api. In the package for DFU there is one interface described below:

```
public interface IShadowSenseDFU : IDisposable
{
    /// <summary>Event handler for firmware update progress event</summary>
    event EventHandler<FirmwareUpdateProgressEvent> FirmwareUpdateProgress;

    /// <summary>Event handler for dfu device arrival</summary>
    event EventHandler<InsertedEvent> DFUDeviceArrived;

    /// <summary>Event handler for dfu device removal</summary>
    event EventHandler<RemovedEvent> DFUDeviceRemoved;

    /// <summary>
    /// Property assigned to the application HID device
    /// Required to set the DFU mode
    /// </summary>
    IShadowSenseDevice ShadowSenseDevice { get; set; }

    /// <summary>Name assigned to device</summary>
    string Name { get; }

    /// <summary>
    /// Scan a DFU file to get the VID, PID and file version
    /// It is recommended that the VID and PID are checked before proceeding
    /// with the firmware update
    /// </summary>
    /// <param name="filepath">DFU filepath</param>
    /// <param name="name">Target Name</param>
    /// <param name="version">DFU file firmware version</param>
    /// <param name="error">String containing the error if function failed</param>
    /// <returns>true if success, else false</returns>
    bool ParseDFUFile(
        string filepath,
        out string name,
        out Version version,
        out string error);

    /// <summary>
    /// Update the device firmware with the referenced DFU file
    /// </summary>
    /// <param name="filepath">Full path of DFU file for new firmware</param>
    Task UpdateFirmware(string filepath);

    /// <summary>
    /// Ask for the name of the DFU device if it is connected
    /// </summary>
    /// <returns>string with the name of the device</returns>
    Task<string> GetDFUDeviceName();
}
```

The UpdateFirmware function performs the whole operation. It is a very long running task so you can register for progress notifications and errors are also handled in this way.