SmartSDR™ for Windows v1.6.21 Release Notes

February 8, 2016

SmartSDR for Windows v1.6.21 is a general release intended for use with the FLEX-6300™, FLEX-6500™, FLEX-6700R™ and FLEX-6700™ software defined radios.

What's New in SmartSDR for Windows v1.6.21

SmartSDR for Windows v1.6.21 is a maintenance release addresses that addresses software defects identified in previous versions of SmartSDR for Windows. Please consult the SmartSDR Software Users Guide for details on using the new and updated features of SmartSDR for the most optimal operating experience.

A cumulative and inclusive **ChangeLog.txt** file along with other ancillary documentation can be found in the Program Files\FlexRadio Systems\SmartSDR\Documentation folder.

It highly recommended that you refer to the Important Release Details section below before upgrading. There are several "best practices" recommendations that will facilitate a smooth transition to the new version of SmartSDR.

ATU Memories: A software defect that would result in ATU memories not being properly recalled on after being put into a bypass state has been corrected. (Defect #2905)

Radio Crash After Importing a Profile Data: A software defect that would result in the radio crashing is greater than ~40 profiles were imported has been corrected. (Defect #2889)

Radio Crash Resulting from using Remote Audio: A software defect that would result in the radio crashing due to a memory leak after 8 hours of use when REMOTE Audio was enabled has been corrected. (Defect #2883)

Delay Sending CW using CWX: A software defect that would result in a delay sending messages using CWX has been corrected. (Defect #2954)

Using ACC PTT overrides non-ACC Audio Inputs: A software defect that would prevent the ACC audio input from overriding DAX TX audio in DIGx modes when PTT is asserted via the ACC connector has been corrected. (Defect #2906)

Fixed several GUI element issues: Multiple software defects resulting in misaligned GUI display elements have been corrected. (Defects #2868, #2896, and #2976)

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Important Release Details

The following "Best Practices" are highly recommended to ensure a seamless and trouble free upgrade to SmartSDR v1.6.21.

Best Practices for installing a new version of SmartSDR for Windows

In preparation for the upgrade to SmartSDR, *always* backup your current Global and TX Profiles. Please refer to the SmartSDR Software User's Guide for detailed instructions related to exporting your profiles to a file on your PC. Whenever you upgrade to a newer version of SmartSDR, there is a database conversion program that runs automatically to convert an older version of the Profile database to the new format or schema. *However, the reverse is not true.* If you have to revert to a previous version of SmartSDR, the older version will not be able to downgrade the database schema. In order to recover your previously created profiles after a software version downgrade, an import of profile data created using the version of SmartSDR you are downgrading to is required for proper operation of your radio.

Ensure your Windows operating system is up to date before installing SmartSDR for Windows. The proper operation and installation of SmartSDR and its associated drivers relies on having an up to date Windows operating system including the root security certificate. It is highly recommended that you run Windows Update and install all mandatory and optional updates before installing SmartSDR for Windows.

Shut down any programs running on your PC that uses a sound card. If necessary, the SmartSDR for Windows installer may install or upgrade the virtual sound card DAX drivers. As part of this process, it will uninstall the older drivers first. If there is an application open on your PC that is using one of the DAX drivers, uninstalling of the existing DAX driver will fail which may result in issues installing the updated DAX drivers. Examples of these types of programs include, but are not limited to digital mode programs, Windows Media Center, web browsers and audio players.

Shut down any programs using a virtual com port. As with the DAX drivers, the installation of SmartSDR CAT may also install new or recreate existing virtual com ports as part of the installation process. Please shut down any program that may use FlexVSP virtual serial port driver. Examples of these include, but are not limited to any digital more programs, loggers, spotting programs and hardware devices that interface through a virtual com port

Managing SmartSDR installed on other PCs connected to your network. If you have installed SmartSDR for Windows on other PCs that are connected to the same network as the FLEX-6000, these PCs may be running SmartSDR CAT and DAX since these applications auto-start when the PC is booted. Running these applications while upgrading SmartSDR for Windows can result in installation issues, therefore it is recommended that these PCs be shut down or remove SmartSDR from Windows from the PCs prior to installing a new version of SmartSDR. In addition, these PCs will need to be upgraded after the FLEX-6000 firmware has been upgraded to ensure a consistent operating experience.

Power off the FLEX-6000 before installing new SmartSDR on your PC. To ensure a seamless upgrade of the entire SmartSDR software ecosystem, it is recommended that you power off your radio before installing the SmartSDR software on your PC.

Power Cycle your Radio after upgrading the firmware. When upgrading the radio firmware, there may be updates to several of the internal subsystems. Power cycling the radio after updating ensures that all processors reboot properly.

Requirements and Best Practices for Installing SmartSDR 1.6.21

There are no release specific special requirements or best practices for installing SmartSDR v1.6.21

Uninstalling Previous Versions of SmartSDR – Is It Necessary?

This is a frequently asked question that does not have a simple "yes/no" answer. **In general the answer is no, but there are special considerations to consider.**

Each version of SmartSDR for Windows is installed in such a manner that running a previous version is a simple matter of running an older version of SmartSDR for Windows and allow the radio firmware to downgrade automatically. This method of installing unique versions of software on your PC rather than upgrading over a previous version allows for an easy and convenient way to switch to a previous version if you so desire.

Unfortunately there are exceptions that result in release specific caveats. In the case of SmartSDR v1.6.21, there are **no** release specific caveats.

In addition to any release specific caveats, there are shared components of the SmartSDR ecosystem used by multiple versions of SmartSDR for Windows. Operationally this typically does not result in any issues, but if a previous version of SmartSDR is uninstalled while there is a newer version installed, the possible removal of one of more of these shared components may make newer versions of SmartSDR inoperable. **Therefore if you desire to uninstall older versions of SmartSDR, it is highly recommended that you uninstall all older versions of SmartSDR before installing a new version of SmartSDR.**

If you chose to uninstall previous version of SmartSDR prior to installing a new version, you may want to perform a comprehensive removal of the SmartSDR ecosystem from your PC. This will ensure that all SmartSDR applications and hardware drivers have been removed.

This is a multi-step process that is outlined in the HelpDesk article **How to do a Complete uninstall of SmartSDR for Windows from your PC**.

1. In some situations the FlexControl will choose a COM port that has already been assigned by a virtual COM port or other device. It may be necessary to move the FlexControl to a different COM port and disconnect/reconnect the FlexControl to resolve this issue. Follow these instructions: https://helpdesk.flexradio.com/hc/en-us/articles/202479329-How-to-Change-the-Com-Port-Assignment-for-a-FlexControl

2. FLEX-6700 only: There is a known issue (#280, #1527) where changing bands on one panadapter may change the frequency of another panadapter when going to or from 2m (or a XVTR using 2m as an IF). This happens due to hardware constraints that require each Antenna to be on only one of 2 possible Nyquist zones (below or above 122.88 MHz) and an interaction with persistence when recalling the antenna selection of the selected band. One way to work around this issue is to use the Band buttons instead of setting the Antenna on the Panadapter or Slice, and then entering the desired frequency into the Slice in order to tune into (or out of) the 2m band (or a XVTR using 2m as an IF).

3. There is a known issue where the ATU can fail to tune if TX Delay is set longer than 30 ms. (#926)

SmartSDR Documentation Available at www.flexradio.com

SmartSDR for Windows Software User's Guide
http://www.flexradio.com/downloads/smartsdr-software-users-guide-pdf/

FLEX-6000 Signature Series Hardware Reference Manual
http://www.flexradio.com/downloads/flex-6000-hardware-reference-manual-pdf/

FLEX-6000 Signature Series Quick Start Guide
http://www.flexradio.com/downloads/flex-6000-family-qsg-single-page-pdf/

SmartSDR CAT User Guide
http://www.flexradio.com/downloads/smartsdr-cat-user-guide-pdf/

D-STAR Waveform How To Guide
http://www.flexradio.com/downloads/d-star-waveform-how-to-guide-pdf/

FreeDV Waveform How To Guide
http://www.flexradio.com/downloads/freedv-waveform-how-to-guide-pdf/

Obtaining Technical Support

If you encounter any issues installing or operating SmartSDR v1.6.21 with FlexRadio Systems' Signature Series software defined radios, please use our on-line Community (https://community.flexradio.com/) to query for information about SmartSDR and the FLEX-6000. If you need assistance using the Community, please refer to the community topic "How to use the FlexRadio Systems Support Community".

If you are unable to find an existing answer to your issue on the Community, please contact FlexRadio Systems technical support by opening a HelpDesk support ticket on-line at https://helpdesk.flexradio.com/

For details on how to submit a HelpDesk support ticket, please refer to the following URL: https://helpdesk.flexradio.com/hc/en-us/articles/202118688-How-to-Submit-a-Request-for-Technical-Support.

Hours of Operation: Our Technical Support engineers are available Monday-Friday from 9:00am-5:30pm Central Time. If you contact Support after business hours, on a holiday or weekend, we will respond to your request for assistance during regular business hours in the order your HelpDesk ticket was received.

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