

## Chapter IV-10 — Advanced Topics

Returning non-zero prevents the pending change to the text from taking effect for `changeCode` = 1, 2, or 3, though only when procedures are already compiled.

The returned value is ignored for other values of `changeCode`.

`BeforeUncompiledHook` is not called before a new experiment is opened, before the experiment is reverted, or before Igor quits. Use `IgorBeforeNewHook` and `IgorBeforeQuitHook` for those scenarios.

### See Also

[User-Defined Hook Functions](#) on page IV-280, `SetIgorHook`, `AfterCompiledHook`, [Operation Queue](#) on page IV-278.

## HDF5SaveDataHook

**`HDF5SaveDataHook (s)`**

`HDF5SaveDataHook` is a user-defined function that Igor calls when saving a wave to an HDF5 file. It allows advanced users to control compression of the dataset written for the wave.

`HDF5SaveDataHook` was added in Igor Pro 9.00.

**NOTE:** `HDF5SaveDataHook` is an experimental feature for advanced users only. The feature may be changed or removed. If you find it useful, please let us know, and send your function and an explanation of what purpose it serves.

### Parameters

`s` is an `HDF5SaveDataHookStruct`.

### Details

See [Using HDF5SaveDataHook](#) on page II-215 for details.

## IgorBeforeNewHook

**`IgorBeforeNewHook (igorApplicationNameStr)`**

`IgorBeforeNewHook` is a user-defined function that Igor calls before a new experiment is opened in response to the New Experiment, Revert Experiment, or Open Experiment menu items in the File menu.

You can use `IgorBeforeNewHook` to clean up the current experiment, or to avoid losing unsaved data even if the user chooses to not save the current experiment.

Igor ignores the value returned by `IgorBeforeNewHook`.

### Parameters

`igorApplicationNameStr` contains the name of the currently running Igor Pro application.

### See Also

`IgorStartOrNewHook` and `SetIgorHook`.

## IgorBeforeQuitHook

**`IgorBeforeQuitHook (unsavedExp, unsavedNotebooks, unsavedProcedures)`**

`IgorBeforeQuitHook` is a user-defined function that Igor calls just before Igor is about to quit, before any save-related dialogs have been presented.

### Parameters

`unsavedExp` is 0 if the experiment is saved, non-zero if unsaved.

`unsavedNotebooks` is the count of unsaved notebooks.

`unsavedProcedures` is the count of unsaved procedures.

The save state of packed procedure and notebook files is part of `unsavedExp`, not `unsavedNotebooks` or `unsavedProcedures`. This applies to adopted procedure and notebook files and new procedure and notebook windows that have never been saved.

### Details

`IgorBeforeQuitHook` should normally return 0. In this case, Igor presents the “Do you want to save” dialog, and if the user approves, proceeds with the quit, which includes calling `IgorQuitHook`.