Details

The user function you specify via the proc keyword must have the following format:

```
Function myFunc(s)
   STRUCT WMBackgroundStruct &s
   …
```

The members of the WMBackgroundStruct are:

Base WMBackgroundStruct Structure Members

Member	Description
char name[MAX_OBJ_NAME+1]	Background task name.
uint32 curRunTicks	Tick count when task was called.
int32 started	TRUE when CtrlNamedBackground start is issued. You may clear or set to desired value.
uint32 nextRunTicks	Precomputed value for next run but user functions may change this.

You may also specify a user function that takes a user-defined STRUCT as long as the first elements of the structure match the WMBackgroundStruct or, preferably, if the first element is an instance of WMBackgroundStruct. Use the started field to determine when to initialize the additional fields. Your structure may not include any String, WAVE, NVAR, DFREF or other fields that reference memory that is not part of the structure itself.

If you specify a user-defined structure that matches the first fields rather than containing an instance of WMBackgroundStruct, then your function will fail if, in the future, the size of the built-in structure changes. The value of MAX_OBJ_NAME is 255 but this may also change. It was changed from 31 to 255 in Igor Pro 8.00.

Your function should return zero unless it wants to stop in which case it should return 1.

You can call CtrlNamedBackground within your background function. You can even switch to a different function if desired.

Use the status keyword to obtain background task information via the S_info variable, which has the format:

NAME:*name*;PROC:*fname*;RUN:*r*;PERIOD:*p*;NEXT:*n*;QUIT:*q*;FUNCERR:*e*;

When parsing S_info, do not rely on the number of key-value pairs or their order. RUN, QUIT, and FUNCERR values are 1 or 0, NEXT is the tick count for the next firing of the task. QUIT is set to 1 when your function returns a nonzero value and FUNCERR is set to 1 if your function could not be used for some reason.

See Also

See **Background Tasks** on page IV-319 for examples.

Demos

Choose File→Example Experiments→Programming→ Background Task Demo.

CtrlFIFO

CtrlFIFO *FIFOName* [**, *key* = *value***]…

The CtrlFIFO operation controls various aspects of the named FIFO.

Parameters

close	Closes the FIFO's output or review file (if any).
deltaT=*dt*	Documents the data acquisition rate.
doffset=*dataOffset*	Used only with rdfile. Offset to data. If not provided offset is zero.
dsize=*dataSize*	Used only with rdfile. Size of data in bytes. If not provided, then data size is assumed to be the remainder of file. If this assumption is not valid then unexpected results may be observed.
flush	New data in FIFO is flushed to disk immediately.