

Builder Xcessory Release Notes

BX System Requirements

BX 6.1 requires the following system configuration:

- At least 32MB of RAM
- The amount of disk space listed in the following table (according to your platform):

Platform	Operating System	Disk Space	
		BX 6.1	BX PRO 6.1
HPPA	HP-UX 11 (and later)	49 MB	93 MB
RS6000	IBM AIX 4.3 (and later)	36 MB	73 MB
IA32	Linux 2.4 (and later)	N/A	111MB
MIPIS	Irix 6.5	30 MB	60 MB
SPARC	Solaris 2.7 (and later)	40 MB	81 MB

- X11R6 or later
- High resolution graphics display: 1024 x 768 is required

New Features in Builder Xcessory

Builder Xcessory 6 focuses on two new areas of improvement. First a “modernization” of the user interface and, second, an expansion of the builder to take advantage of all the new features found in Motif 2.x.

Design Changes and Improvements Made Since Version 6.0

- Overlays are a new concept to Builder Xcessory. They provide a mechanism for BX to support different widget sets which have fundamental conflicts in resource types. (Such as Motif 2.1 and 1.2) In the future, Overlays will be provided and no updates of BX will be needed to support a new toolkit. For the 6.1.2 release of Builder Xcessory, one Overlay is provided, Motif 1.2. If you wish to build applications using Motif 1.2 then you must install this Overlay. If you wish to continue developing in Motif 2.1 simply do not choose the Overlay when you install. If you want to develop in both Motif 2.1 and 1.2 then you must install BX in two places: one place with the Overlay and one without it. The installer will help you do this with no conflicts.
- See the changelog for details on bug fixes.

Design Changes and Improvements Made Since Version 5.x

- The browser has been integrated with the palette to provide a main window, this unclutters the screen.
- The palette was placed on the right side of the Main Window. Tests show most users place the Main Window on the left side of their screen. With the palette on the right, the amount of mouse movement is minimized to prevent wrist damage.
- To modernize the look of BX, and to accommodate users with smaller screens, the footprint of BX has been reduced. For users who are visually impaired larger Icons can be seen by starting BX with the “`bx -largeIcons`” flag.
- BX is now started with the command “`bx`” as opposed to “`bx50`” which many users found confusing.
- New widgets have been added.
- Tool Tip help added to tool bar, previously available only on palette.
- Intuitive Icons which are more consistent with other software.
- New Widgets: ComboBox, Container, IconGadget, SpinBox, and NoteBook.
- New Resources for Motif Widgets.
- New Callbacks for UTM support.
- Improved Resource grouping for easy access (Visual/Behavior/Callback).
- Major re-write of Viewkit (see Viewkit Changes for more information).

NEW FEATURES IN BUILDER XCESSORY
Design Changes and Improvements Made Since Version 5.x

- Cleaner browser display provides a larger section of widget hierarchy in less space.
- New Support for CVS.
- Simplified Install procedures.
- Updated Code generation to support Motif 2.1 and X11R6.
- Updated Tutorials and Examples.
- Class C++ Template Type Support.
- New Media key for quicker access to support. Now, you don't need to remember your support number, the media serial number is available from within BX.
- Web update information.
- New documentation format in Adobe PDF, easy access, easy to print.
- Information on fixed bugs can be found in the "Change Log" on the help menu.

Known Problems in Builder Xcessory

The following sections describe known problems in Builder Xcessory 6.1.2

Unmake Class on VkWindow

Builder Xcessory incorrectly allows you to "unmake class" on a VkWindow, causing indeterminate results during code generation.

Naming Classes

Builder Xcessory does not prevent you from assigning your class the same name as a ViewKit or Java class.

Color Limitations

Builder Xcessory will not read pixmaps or icons containing more than ninety colors. If an icon or pixmap has more than ninety colors, Builder Xcessory displays an error message. Use other utilities, such as "xv", to perform color reduction on images that exceed the limitation.

XmNdecimalPoints Resource

The resource XmNdecimalPoints is poorly defined in Motif 2.1. It is used as a constraint resource in XmSpinBox and used as a regular resource in XmScale. UIL can not handle this conflict. The use of the resource is wrong and effects Motif 2.1. Therefore, you can not use this resource if you are generating uil code. Unfortunately, this bug also affects BX users who are using the SpinBox. As of BX6.1.2, we still have not found a suitable work-around to allow the resource to work well in both Widgets. It was decided to maintain XmScale functionality at the expense of XmSpinBox. If you wish you use the SpinBox but not the Scale, and need to set this resource, you must edit the file motif.wml found in \${BXHOME}/xcessory/wml. Change the line which reads:

```
XmNdecimalPoints: Argument{
```

to read

```
XmNdecimalPoints: Constraint{
```

Porting Issues in Builder Xcessory

File Load Warnings

When loading a UIL file created by BX6 you may see many warnings in the message window complaining about resource type changes. Motif 2.1 has changed the types of many resources. When you save your UIL file the correct resource types will be saved.

Widget Integration

Widget integration methods have changed. Minor changes in the catalog and wml files will cause conflicts and need to be changed by hand. Catalog items need a large pixmap file:

```
LargePixmapFile = "XiColorSelector";
```

To see examples of changes to the catalog file, please read chapter nine of *Customizing Builder Xcessory*, "Creating Other Control Files". To learn more about modifying WML files, please see chapter eight of *Customizing Builder Xcessory*, "Modifying the WML File" or {BX}/xcessory/motif.wml.

If you have installed an integration product from ICS, like XRT widget integration, or INT widget integration, ask your ICS sales rep to send you a new BX6.1.2 integration kit.

BX license changes on Linux

The Linux license scheme has been redesigned.

Please refer to our FAQ which is included with every distribution and is also online at either

<http://www.ics.com/support/docs/bx/6/bxprofaq.pdf>

or

<http://www.ics.com/support/docs/bx/6/bxprofaq.html>

Generating UIL Classes

Within a class, child widgets of a Form should not reference other child widgets for attachments. The UIL compiler does not make proper alignments for multiple instances of the class. This is a limitation of the UIL compiler. Other code generation languages are not affected.

Instance Name Length for UIL

Instances can not have a length greater than 32 characters if you are using the UIL compiler. This is a limitation of UIL and not BX. BX will alert you when a name exceeds the UIL limit.

XmToggleButton Resource conversions

With Motif 2.1 came several major changes to the XmToggleButton widget resources which might cause problems when BX reads in UIL files generated from BX5. The resource XmNindicatorOn has changed from a Boolean value to an enumerated type. Possible values are:

- XmINDICATOR_NONE
- XmINDICATOR_BOX
- XmINDICATOR_FILL
- XmINDICATOR_CHECK
- XmINDICATOR_CHECK_BOX
- XmINDICATOR_CROSS_BOX
- XmINDICATOR_CROSS

For the resource XmNset possible values now include:

- XmUNSET
- XmSET
- XmINDETERMINATE
- FALSE
- TRUE

For both of these resources, BX may not always choose the best match when converting your UIL file. We recommend that if you use toggle buttons you quickly verify that the resources are those which you desire. For more information on the different values, please consult your Motif 2.1 documentation.

Platform Issues in Builder Xcessory

Solaris

License Manager Daemon (Solaris 8+)

With Solaris 8, the number of file descriptors was increased from the default of 1024. This can cause a variety of problems with the FlexLM daemon that manages your BX PRO licenses. Typically, the daemon ICSBX will crash and you will only be able to run BX in demo mode.

You need to manually set the number of file descriptors in the shell that starts the lmgrd daemon to something less than 4096. Our suggestion is to use 1024 since that was the default on Solaris 7 systems. To do so:

For csh (and its variants):

```
% limit descriptors 1024
```

For sh (and its variants):

```
% ulimit -H -n 1024
```

Restart the lmgrd and do a:

```
% ps -ef
```

You should see the ICSBX daemon running.

BX Exits with Fatal Relocation Error (Solaris 7+)

BX exits with the following error message:

```
ld.so.1: /opt/bxpro-6.1/bin/bxb: fatal: relocation error:
file /opt/bxpro-6.1/bin/bxb: symbol __lcDstdJbad_allocG__vtbl_
referenced symbol not found
```

This error message is probably due to you having an older version of a C++ shared library installed. To confirm this, execute the following commands:

```
% what /usr/lib/libC.so.5 | grep RELEASE
% what /usr/lib/libCrun.so.1 | grep RELEASE
```

If the output of either of these commands is: **Workshop Compiler 5.0 C++ 5.0**, then download the Sun

patch 106327-16. This patch is for SunOS 5.7 and contains 32-Bit Shared library patch for C++ and includes libC.so.5 and libCrun.so.1. </p>

You should create soft links to these libraries:

```
libCrun.so -> libCrun.so.1
```

```
libC.so-> libC.so.5
```

Make sure that your environment variable LD_LIBRARY_PATH includes the directory with these soft links.

IRIX

BX Install Fails (IRIX 6.5.18+)

The SGI removable media daemon "mediad", which monitors the removable media devices on the system, fails to properly detect the format of the BX Install CD. If you list the files on the CD, it will appear that none of the BX installer files have execute permissions. To correct this, first disable the "mediad" daemon and mount the file system manually. (You will need to be a "root" to run these commands).

```
%> /etc/init.d/mediad stop
```

```
%> mount -t iso9660 /dev/rdisk/dks0d4vol /CDROM
```

If the above command does not work, then find the appropriate device on your system and then mount the CD. Once you are done installing Builder Xcessory, unmount the CDROM and restart the "mediad" media demon.

```
%> umount /CDROM
```

```
%>/etc/init.d/mediad start
```

Linux

Undefined Routine xmSimpleSpinBoxWidgetClass (Linux: all releases)

This message indicates that BX found lesstif (a Motif clone), instead of a valid Open Motif release. BX 6 does not work with lesstif. The solution to this is to install a compatible version of Open Motif.

Open Motif Compatibility (Linux: all releases)

BX PRO 6.1 is compatible with Open Motif 2.2 on Red Hat 7.3+ and is configured to use Open Motif 2.1 on Red Hat systems prior to Red Hat 7.3. You must use the proper version of Open Motif for BX to

run.

Crash When Using an Xterm to Remotely Execute BX Installed on a Linux System (Red Hat 7.3)

BX is known to crash when run on RH Linux 7.3 if the environment variable LANG is set to en-US.iso885915 and you are running BX on a foreign X server. More information on this bug can be found at

<http://bugzilla.redhat.com/bugzilla/showbug?id=62844>.

To work around it, please set your environment variable LANG to en_US. For example, if you are using the csh shell you would type:

```
%setenv LANG en_US
```