

Building g11n

Building g11n on for illumos based system

Do onu or image-update to the illumos onnv

Install all pkg:/locale/* packages

Install cbe

Install build dependencies

```
pkg install \  
pkg:/compatibility/ucb \  
pkg:/developer/build/libtool \  
pkg:/developer/documentation-tool/doxygen \  
pkg:/developer/documentation-tool/gtk-doc \  
pkg:/developer/gnome/gettext \  
pkg:/developer/swig \  
pkg:/editor/gnu-emacs/gnu-emacs-gtk \  
pkg:/library/desktop/gobject/gobject-introspection \  
pkg:/library/idnkit/header-idnkit \  
pkg:/library/libconfuse \  
pkg:/library/motif \  
pkg:/system/input-method/ibus \  
pkg:/system/input-method/ibus/table \  
pkg:/system/input-method/library/libdatrie \  
pkg:/system/input-method/library/libthai \  
pkg:/system/input-method/library/ml7n \  
pkg:/system/input-method/scim \  
pkg:/system/library/iconv/unicode \  
pkg:/system/library/liblayout \  
pkg:/library/gnome/base-libs
```

Get the source

```
mkdir /ssd/g11n-build  
cd /ssd/g11n-build  
  
hg clone http://hg.openindiana.org/aszeszo/g11n  
hg clone ssh://anon@hg.opensolaris.org//hg/nv-g11n/g11n-spec  
hg clone http://hg.openindiana.org/aszeszo/inputmethod  
hg clone ssh://anon@hg.opensolaris.org//hg/nv-g11n/messages
```

All of these are obsolete. Clone these repositories instead:

Clone the source

```
hg clone https://hg.openindiana.org/sustaining/oi_151a/g11n/g11n  
hg clone https://hg.openindiana.org/upstream/oracle/g11n/g11n-spec  
hg clone https://hg.openindiana.org/sustaining/oi_151a/g11n/inputmethod  
hg clone https://hg.openindiana.org/upstream/oracle/g11n/messages
```

Build g11n bits

```

cd /ssd/glln-build/glln

export PATH=/opt/sunstudio12.1/bin:/usr/bin
export SRC=$PWD

# download files with missing sources
mkdir proto
cd proto
sh ../glln/glln-downloads.sh
cd ..

make install

```

The build works better this way:

Revised build g11n bits

```

$ cd glln-build/glln
/* patch glln-downloads.sh */
$ ksh
$ export PATH=/opt/sunstudio12.1/bin:/usr/bin
$ export SRC=$PWD
# download files with missing sources
$ mkdir proto
$ cd proto
$ sh ../glln-downloads.sh
$ cd ..
$ make install

```

Note that many of the font files are not found. Change the SOURCE_URL in Makefiles to correct this situation.

Build g11n-spec

```

cd /ssd/glln-build/glln-spec

export L10N_BUILDNUM=148

# apply the patch below and then run:

./build-glln-spec.sh

```

Note that most of the patch is no longer necessary. The patch will not apply without changes.

```

diff --git a/build-glln-spec.sh b/build-glln-spec.sh
--- a/build-glln-spec.sh
+++ b/build-glln-spec.sh
@@ -73,7 +73,7 @@

# Explicitly specifying location to enable to use pkgtool (pkgbuild)
# not yet in jdsbld.
-PKGTOOL="/opt/pkgbuild/bin/pkgtool"
+PKGTOOL="pkgtool"

# IPS repos are created in $PKGDEST if defined in environment,
# otherwise in $BLDDIR (build.$MACH).
@@ -84,10 +84,10 @@
export PKGBUILD_SRC_IPS_SERVER="file://$SRC_IPS_REPODIR/"

rm -rf "$IPS_REPODIR"
-pkgrepo create --version 3 "$PKGBUILD_IPS_SERVER"
+pkgrepo create "$PKGBUILD_IPS_SERVER"
  pkgrepo set -s "$PKGBUILD_IPS_SERVER" publisher/prefix=${PUBLISHER}
  rm -rf "$SRC_IPS_REPODIR"
-pkgrepo create --version 3 "$PKGBUILD_SRC_IPS_SERVER"
+pkgrepo create "$PKGBUILD_SRC_IPS_SERVER"

```

```

pkgrepo set -s "$PKGBUILD_SRC_IPS_SERVER" publisher/prefix=${PUBLISHER}

for spec in $SPECFILES
@@ -126,7 +126,7 @@
    PKGBUILDARGS="$CMD --nonotify --download --topdir=$BLDDIR --specdirs=$SPECDIRS "
    PKGBUILDARGS="$PKGBUILDARGS --sourcedirs=$SRCDIRS --patchdirs=$PATCHDIRS "
    PKGBUILDARGS="$PKGBUILDARGS --logdir=$BLDDIR/log"
-   PKGBUILDARGS="$PKGBUILDARGS --pkgformat=ips"
+   PKGBUILDARGS="$PKGBUILDARGS --ips"
    PKGBUILDARGS="$PKGBUILDARGS --halt-on-errors"

    [[ -z "$DOWNLOADS" ]] || PKGBUILDARGS+=" --tar=$DOWNLOADS"
diff --git a/icu/icu.depend b/icu/icu.depend
--- a/icu/icu.depend
+++ b/icu/icu.depend
@@ -1,10 +1,10 @@
#
# Copyright (c) 2009, 2010, Oracle and/or its affiliates. All rights reserved.
#
-Requires: SUNWcar
-Requires: SUNWkvm
-Requires: SUNWcsr
-Requires: SUNWcsu
-Requires: SUNWcsl
-Requires: SUNWlibms
-Requires: SUNWlibc
+#Requires: SUNWcar
+#Requires: SUNWkvm
+#Requires: SUNWcsr
+#Requires: SUNWcsu
+#Requires: SUNWcsl
+#Requires: SUNWlibms
+#Requires: SUNWlibc
diff --git a/include/default-depend.inc b/include/default-depend.inc
--- a/include/default-depend.inc
+++ b/include/default-depend.inc
@@ -3,8 +3,8 @@
#
# Copyright (c) 2003 Sun Microsystems, Inc.
#
-Requires: SUNWcar
-Requires: SUNWkvm
-Requires: SUNWcsr
-Requires: SUNWcsu
-Requires: SUNWcsl
+#Requires: SUNWcar
+#Requires: SUNWkvm
+#Requires: SUNWcsr
+#Requires: SUNWcsu
+#Requires: SUNWcsl

```

Build messages

```

cd /ssd/gln-build/messages
export SRC=$PWD
make install

```

Note that for the messages build to work, you will first have to do a manual install of `/usr/jdk/packages/javax.help-2.0/lib/jhall.jar` .

Build inputmethod stuff

Part 1

```

cd /ssd/gln-build/inputmethod/iim/build
./build-iim.sh

```

Note that before running the script, you should modify it to obtain the source from <http://dlc.openindiana.org/oi-build/source-archives/im-sdk.tar.bz2> .

Part 2

```
cd /ssd/g11n-build/inputmethod/sunpinyin
./build-sunpinyin.sh
```

Part 3

Generate sunpinyin-ime-1.0.tar.gz and sunpinyin-ime-2.0.tar.gz tarballs (instructions in /ssd/g11n-build/inputmethod/README)

```
cd /ssd/g11n-build/inputmethod/specs
mkdir -p build.`uname -p`/SOURCES
. /opt/dtblld/bin/env.sh
export L10N_BUILDNUM=148
./build-im.sh
```

It is worth removing --halt-on-errors from PKGBUILDARGS in build-im.sh when figuring out build dependency issues.

Note that many of the source archives are at different URLs now. You must change the URLs in the spec file to overcome these errors. As well, some source archives are no longer available. In these cases, you must omit those spec files from the shell script. You must also install two IPS packages: system/input-method/library/libchewing system/input-method/library/libhangul . You must install two Svr4 packages: SUNWgob2 SUNWibus-table-devel . These are only available in build.*PKGS after a run of build-im.sh .

Package everything up

```
cd /ssd/g11n-build/g11n

export SRC=$PWD
export L10N_BUILDNUM=148
export CLOSED_BUILD=\#
export PKGARCHIVE=$SRC
export PKGPUBLISHER_REDIST=l10n-nightly
perl -pi -e "s/(L10N_BUILDNUM=).*\/\1\ ${L10N_BUILDNUM}/" Makefile.buildnum
```

Copy contents of /ssd/g11n-build/messages/proto and /ssd/g11n-build/proto to /ssd/g11n-build/g11n/proto, and then move X11 into the right location:

```
mv /ssd/g11n-build/g11n/proto/i386/fileroot/lib/X11 /ssd/g11n-build/g11n/proto/i386/fileroot/usr/lib
```

Publish the packages

```
cd pkg
make install
```

Consolidate the repositories

```
cp -rP ../../g11n-spec/build.`uname -p`/repo.spec/publisher/*/{file,pkg} $SRC/repo.redist

cp -rP ../../inputmethod/specs/build.`uname -p`/repo.imspec/publisher/*/file $SRC/repo.redist
cp -rP ../../inputmethod/specs/build.`uname -p`/repo.imspec/publisher/*/pkg/system* $SRC/repo.redist/pkg
cp -rP ../../inputmethod/specs/build.`uname -p`/repo.imspec/publisher/*/pkg/developer* $SRC/repo.redist/pkg

# then run the command below to update the repository

/usr/lib/pkg.depotd -p 10000 -d $SRC/repo.redist --add-content --exit-ready
```

The final repository can be found in

```
/ssd/g11n-build/g11n/repo.redist
```