

Unicode Application Deployment with Sirius Mods 7.7

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Agenda

- Some key points
- Exhibit demo application
 - Code is available



Unicode values

- Unicode %variables
- Literals - U intrinsic function
- Results of some intrinsic functions
- XmlDocs
 - When deserializing, use AllowUntranslatable



XHTML entities for creating Unicode literals

- For example:

```
%euro Unicode Initial('&euro;':U)
```

- All 253 entities defined in <http://www.w3.org/TR/xhtml1/dtds.html#h-A2> as of Jan 28, 2009



UnicodeWith method

Basic building block, along with UnicodeSubstring
Other basic Unicode intrinsic functions available as well

Often needed to build up literal string:

```
%org Longstring Initial('Fraternity ')
%name Unicode Initial('&kappa;':U)
&fullname = %org:UnicodeWith(%name)
```



Print/Audit/Trace statements character encode Unicode value

- Previously, Print caused request cancellation on untranslatable Unicode value; now Unicode value is character encoded
- Small incompatibility introduced in 7.6 Mods; following fragment formerly printed 'Jack & Jill', now prints 'Jack & Jill':

```
%u Unicode Initial('Jack & Jill')
Print %u
```



V7R2 UTF-8 field constraint

- DEFINE FIELD <name> WITH UTF-8
- Attempt to store "most" EBCDIC strings will cause request cancellation
- Use UnicodeToUtf8 to update field from Unicode value
- Use Utf8ToUnicode to convert field to Unicode value
- If not using V7R2, can store into non-UTF-8 field, lose data checking



Structure of demo application

- BROWSE.UL: display data on browser
 - Show result
 - Look at code later
- GETDATA.UL: web service to retrieve data
 - Look at code later
- D/I SHOWXML: auxiliary 3270 proc to show XML returned by GETDATA.UL .. it's in Unicode
 - Note AllowUntranslatable on ParseXml



Structure of demo application (*continued*)

- E BROWSE.UL
 - First part same as SHOWXML, adding XmlNodeList for navigation
 - \$Web_Type('text/html; charset=utf-8')
 - Note use of XmlDocument to build HTML page
 - € to put literal in table heading
 - UnicodeWith - fine to use always, required for untranslatable values
- E GETDATA.UL
 - Retrieve from UTF-8 field, using Utf8ToUnicode



Structure of demo application (*continued*)

- E LOAD
 - For demo, mocked-up input is hand-coded XML document; note use of AllowUntranslatable
 - Storing into "UTF-8" field with UnicodeToUtf8

