



cbg Workshop

Uniface 9.3 What's new ?

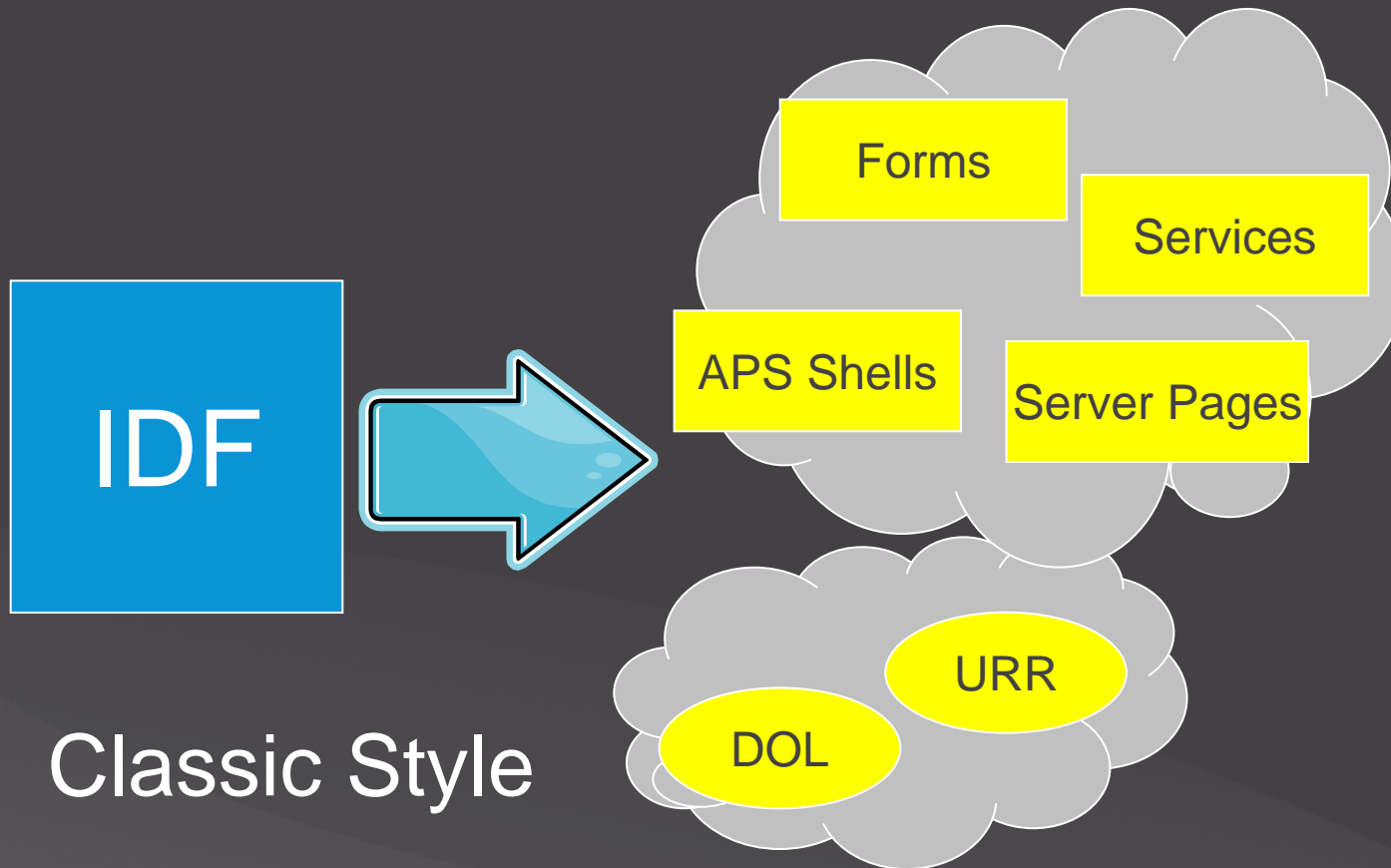
Michael Zille
Trainer

- **Easy Deployment**
- **Cross-Reference**
- **Proc Functions**
- **Assignment Settings**
- **Command line switches**
- **GUI Enhancements**
- **Error Logging**
- **SMTP Authentication**

Uniface 9.3 Easy Deployment

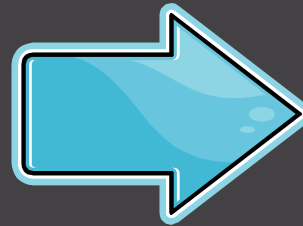
- **Einfache Verteilung von Applikationen (Distribution)**
- **Einfache Aktualisierung von Applikationen (Updates)**
- **Einfache “Zusammenstellung” von Applikationen (Partitioning)**

Das "alte" Runtime Repository



Das "neue" Runtime Repository

IDF



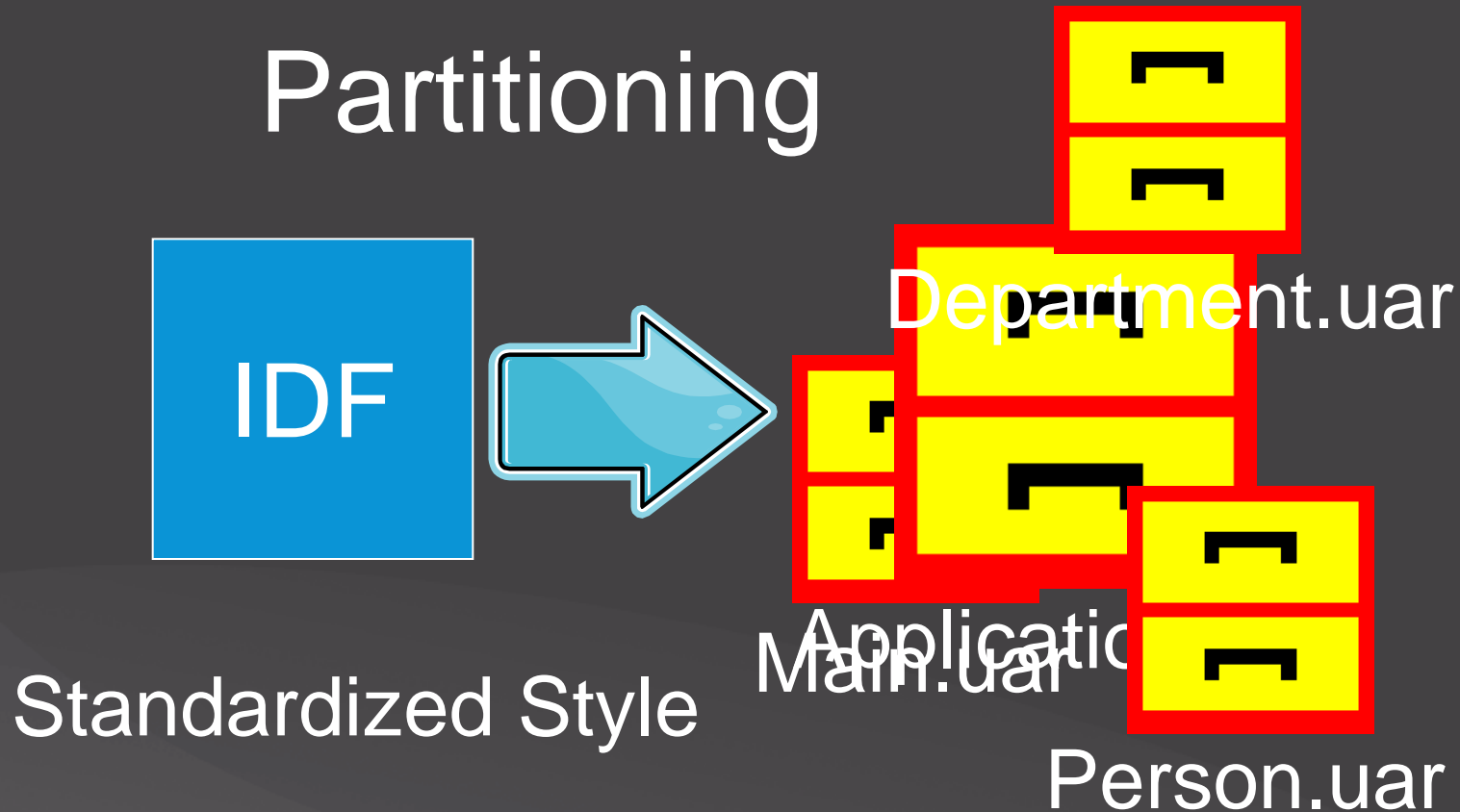
Standardized Style

| | |
|------------|-------------|
| Forms | Global Proc |
| Services | DTD's |
| APS Shells | Panels |
| Messages | Glyphs |
| Signatures | ... |

Standardisierte
Verzeichnisstruktur

Die "neue" Art der Applikationsverteilung (New Style Deployment)

Partitioning



Partitioning

Main.uar

Person.uar

Global Proc

DTDs

Signatures

Services

Messa

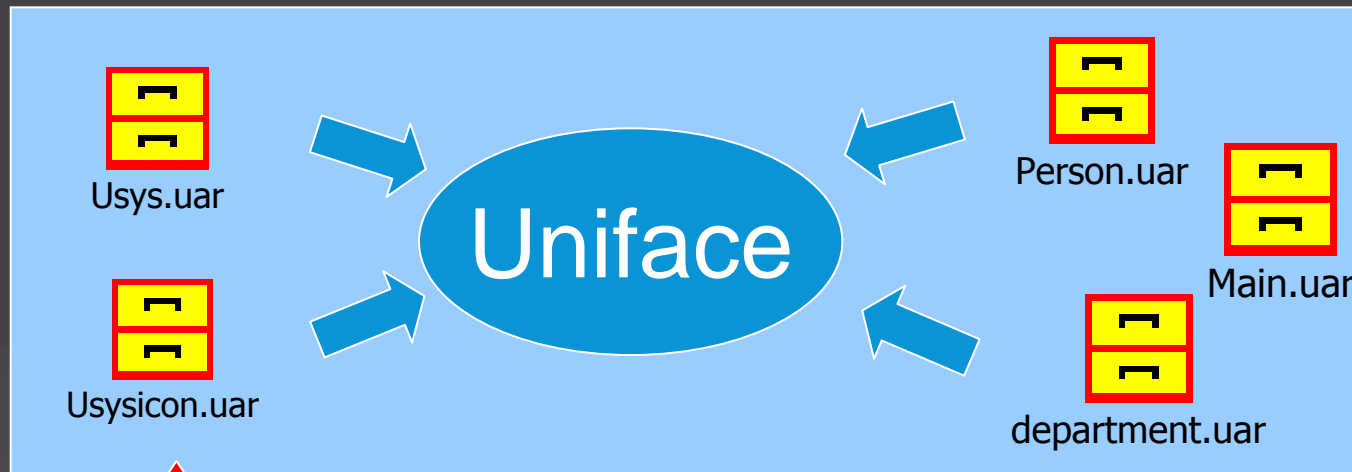
APS shel


Glyphs

Forms

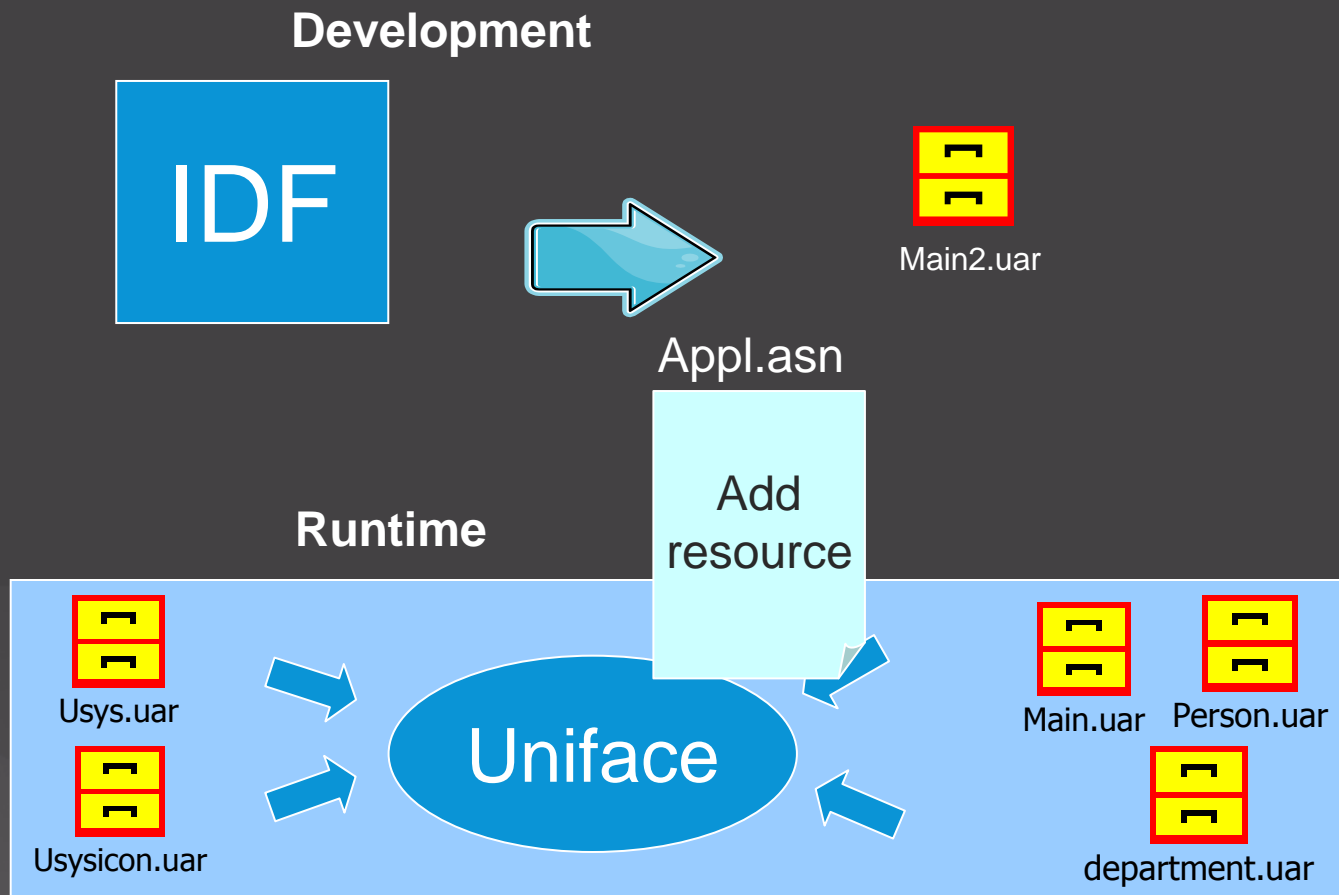
Der "neue" Deployment Style

Uniface Runtime Application



 Runtime UARs befinden sich in /usys

Der "neue" Deployment Style



Der “neue” Deployment Style

Assignment Settings

Welche Settings sind für den “new style” nötig:

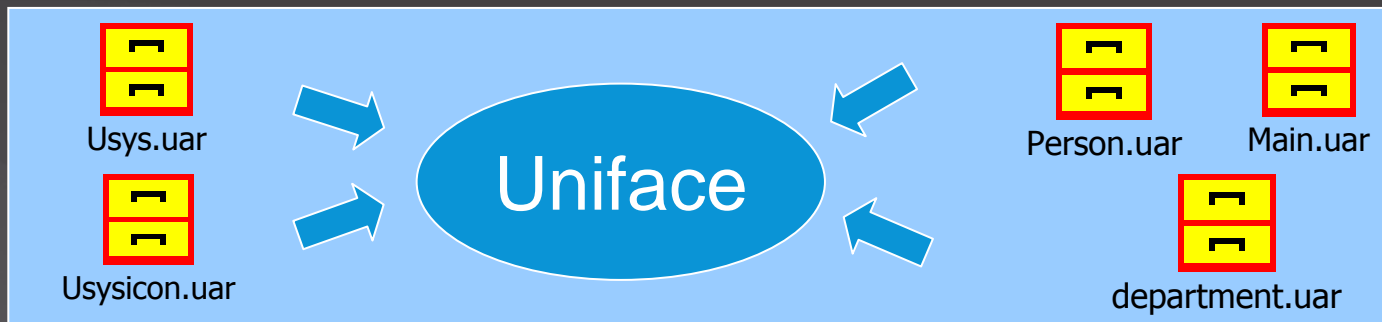
- ASN Settings für die Laufzeit
- ASN Settings für die Entwicklung

Laufzeit-Settings

Appl.asn

```
[SETTING]
$SEARCH_RESOURCES = Resources_Only

[RESOURCES]
Main.uar
Person.uar
Department.uar
```



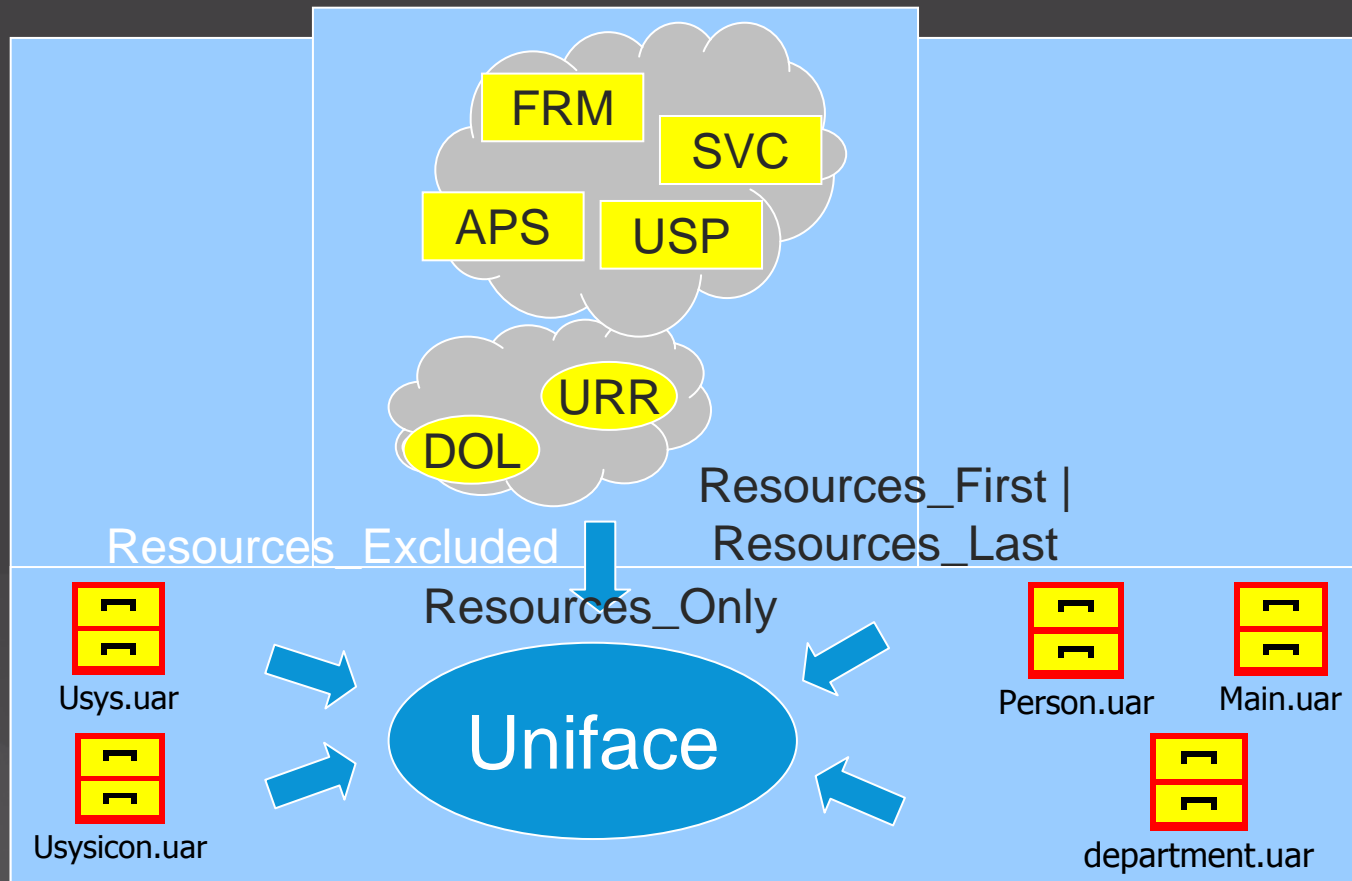
Laufzeit-Settings

[SETTINGS]

\$SEARCH_RESOURCES =

- Resources_Only
- Resources_Excluded (default)
- Resources_First
- Resources_Last

\$Search_Resources = ...



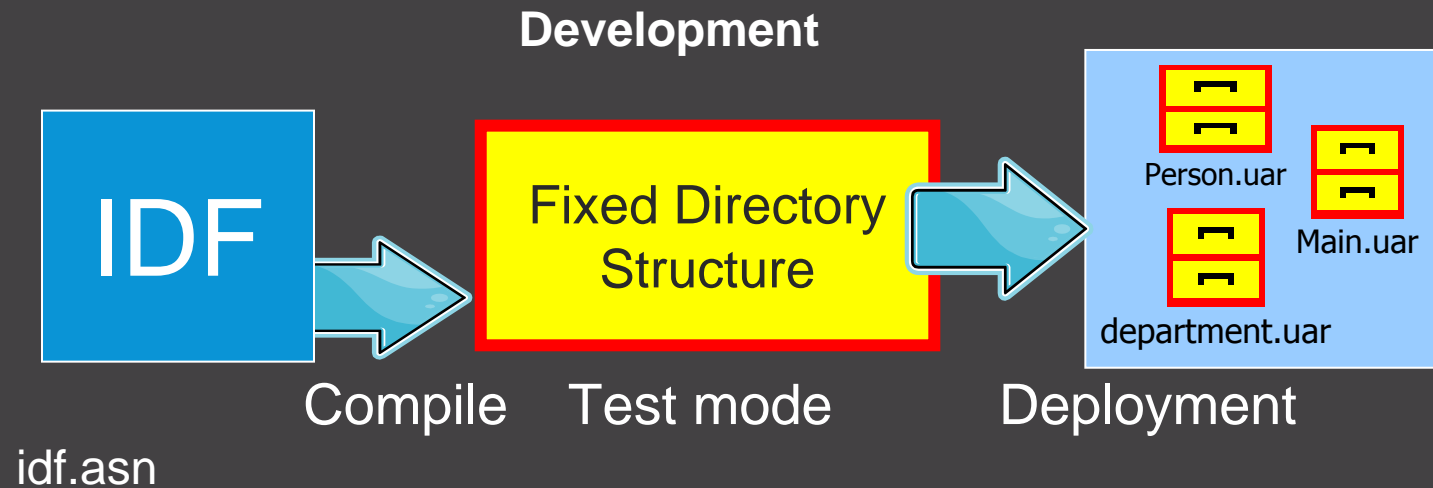
Der “neue” Deployment Style

Assignment Settings

Welche Settings sind für den “new style” nötig:

- ASN Settings für die Laufzeit
- ASN Settings für die Entwicklung

Settings für die Entwicklung



```
[SETTING]
```

```
$RESOURCES_OUTPUT = {Path\}Directory
```

```
$SEARCH_RESOURCES = Resources_First
```

Resource Locations

3 Main Locations

1. Compiler Output

- Defined by \$Resources_Output
- \$RSO

Fixed Directory Structure

2. The Resources (UARs)

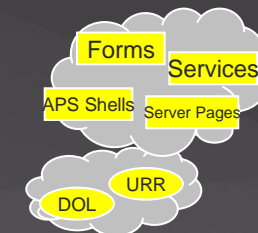
- Defined by [RESOURCES] section
- \$RES



Appl.uar

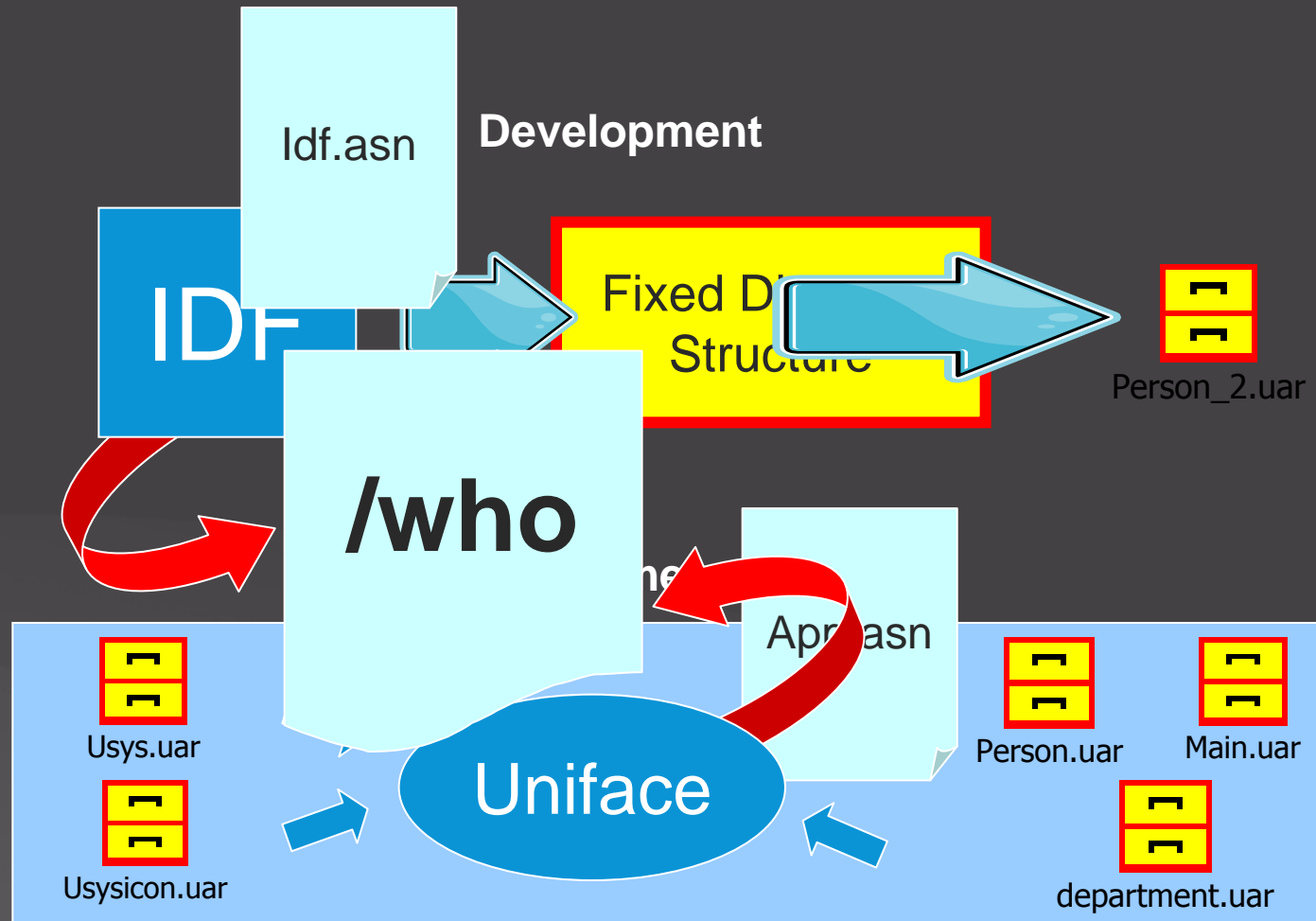
3. The Classic style

- DOL/UOBJ & URR/ULANA & [FILES]



- Uniface ist im “Classic Style” installiert
- Usys Directory enthält beideStyles
- IDF Schalter /dis /ins /dol /urr funktionieren weiterhin
- \$search_descriptor & \$search_object sind obsolete im “resources_only”- Modus
- 9.3 Urr’s & Dol’s habenein neues Format
- 9.3 UARs hat ein neues Format
- Keine zusätzlichen Migrationsbelange:
die Applikation muss lediglich komplett unter Uniface 9.3 (re-) kompiliert werden

Der "neue" Deployment Style



/who

```
[Inactive idf Transcript]
File
Installation parameters
Hardware Platform = MSW
Platform = Windows XP
Uniface Version = 9.2.03
Patch = 0301
Installation Identification = <none>
C Run time library =
Default character set = CP1252
Byte sequence = System Independent (Little Endian)
Default video attributes = (Inverse)
Selected drivers = PSV(1.0) XML MSW(1.0) UDO UD1 UD2
Selected drivers = UD3 UD4 UD5 UD6 UD7 UD8 UD9 OVS
Selected drivers = SOP(1.0) TXT SEQ TCP MSS SNA SOL
IDF application dictionary Dbms = SOL
SYS Printer attributes Dbms = SOL
DEF Default Dbms = SOL
UUU Uobj Dbms = SOL
GUI Default Gui interface = MSW
--- Paths after .\adm\idfdemoU9.asn ---
$$SOL=$INS_SOL      $$MSW=$INS_MSW      $$PSV=$INS_PSV
$$TCP=$INS_TCP      $$SNA=$INS_SNA      $$OVS=$INS_OVS
$$XML=$INS_XML      $$UDO=$INS_UD0      $$UD1=$INS_UD1
$$UD2=$INS_UD2      $$UD3=$INS_UD3      $$UD4=$INS_UD4
$$UD5=$INS_UD5      $$UD6=$INS_UD6      $$UD7=$INS_UD7
$$UD8=$INS_UD8      $$UD9=$INS_UD9      $$CHR=$INS_CHR
$$MW1=$INS_MW1      $$COM=$INS_COM      $$JAV=$INS_JAV
$$TUX=$INS_TUX      $$CIC=$INS_CIC      $$IMD=$INS_IMD
$$IDF=$INS_SOL      $$DEF=$INS_SOL      $$SYS=$INS_SOL
$$UUU=$INS_SOL      $$GUI=$INS_MSW      $$MSS=$INS_MSS
$$SEQ=$INS_SEQ      $$TXT=$INS_TXT      $$SOP=$INS_SOP
$$SOL1=$INS_SOL     $$WFM=$INS_SOL      $$WEB=$INS_SOP

*finished*
```

```
[Inactive idf Transcript]
File
UNIFACE 9.3.01
-----
Executable = E:\Programs\usys9.3\bin\idf.exe
Application = Development Environment
Release update = 9.3.01.02 (P101 1112_1) - November 12, 2008
Patch = P101
Platform: Operating system = MSW: Windows XP (WXP)

usysbin directory = E:\Programs\usys9.3\bin\
usysadm directory = E:\Programs\usys9.3\adm\
usys directory = E:\Programs\usys9.3\usys\
working directory = E:\Programs\usys9.3\project\

$RSO = UOBJ.TEXT (Objects)
$RSO = ULANA.DICT (References)
$RSO = [FILES] (Components)

$RES = E:\Programs\usys9.3\usys\usys.dol
$RES = E:\Programs\usys9.3\usys\usys.urr
$RES = [FILES] (Components)

Assignment file = E:\Programs\usys9.3\adm\usys.asn
Assignment file = usysadm:idf.asn

$$SYS_charset = CP1252
$$DEF_charset = CP1252
$$WEB_charset = CP1252

(c) 2006-2008 Compuware Corporation. All rights reserved.

*finished*
```

ASN Settings – eine kleine Erinnerung

IDF für den “new style” einrichten

- \$Search_Resources = Resources_First
- \$Resource_Output festlegen

Laufzeitumgebung für den “new style” einrichten

- \$Search_Resources = Resources_Only
- [RESOURCES]-Section festlegen

Uniface Resource Manager (urm)

Command Line Utility zum Bearbeiten von Uniface Ressourcen

- Bearbeiten von Uniface Zip Dateien .uar, .dol, urr, .dis und .zip
- Konvertieren von .uar, .dol, urr und .dis in ZIP-Format
- Uniface Import und Datenkonvertierung
- Datei- und Verzeichnisoperation

Uniface Resource Manager (urm)

urm split

Erstellt eine oder mehrere Archivdatei (.uar) auf der Basis von Object, library und Sprache.

urm show

Zeigt die Version, die Readme-Datei, oder den Inhalt der ausgewählten Archivdatei, oder validiert deren Inhalt.

urm entitycopy

Kopiert Daten aus einer DBMS oder Datei in eine andere.

Entspricht dem Command Line Switch /cpy und der ProcAnweisung entitycopy

Uniface Resource Manager (urm)

Datei- und Verzeichnisoperation

- copy
- rename
- move
- delete
- list
- touch
- merge

Daten

- ⇒ zeigen auf *WO* in der Applikation Code “objects” verwendet oder referenziert werden
- ⇒ können z. B. verwendet werden
 - 🔗 um festzustellen, welche Code “objects” in einen “distribution package” benötigt werden
 - 🔗 um zu analysieren, welche Auswirkungen eine Änderung auf die Anwendung hat
- ⇒ stehen in der Repository Table UXCROSS.DICT
- ⇒ basieren auf so genannten „symbol tables“
- ⇒ können beim Kompilieren automatisch generiert werden
- ⇒ oder durch das Laden von „Symbol Table“-Dateien aktualisiert werden

Symbol Tables

- ⇒ enthalten “object references” für kompilierte
 - ⇒ Komponenten
 - ⇒ Start-Up Shells
 - ⇒ Globale Prozeduren
 - ⇒ Menues
 - ⇒ Panels
- ⇒ können verwendet werden um Cross-Reference Daten zu generieren (während des Kompiles) und zu speichern
 - 📁 im Repository (UXCROSS.DICT)
 - 📁 in „Symbol Table“-Dateien

*APPLICATION.APSSYM
COMPONENT.CPTSYM
CENTRALPROC@LIBRARY.CPRSYM
MENU@LIBRARY@LANGUAGE.MENSYM*

Cross Reference

Daten - Generieren und Pflegen

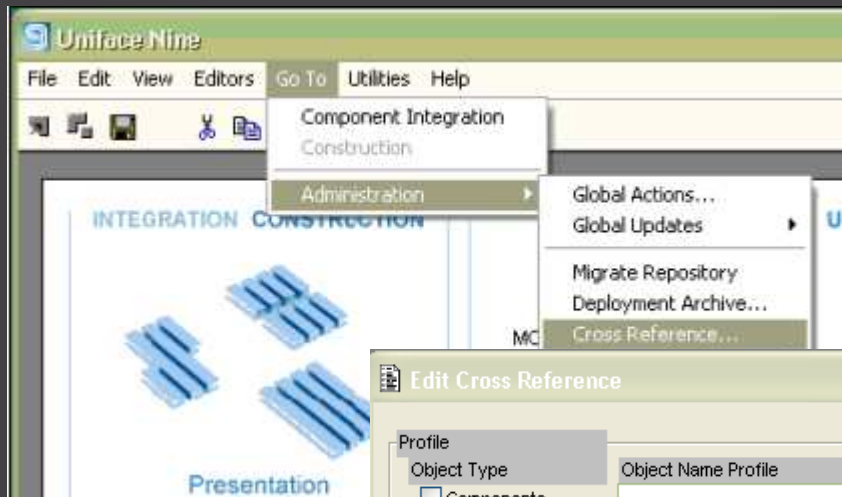
- ⇒ Die Daten werden im Repository in UXCROSS gehalten
- ⇒ Bei folgenden Einstellungen werden die Daten beim Kompilieren generiert und in UXCROSS geschrieben
 - ⇒ /sym=2 oder 3
 - ⇒ \$SYMBOL_TABLE = 2 oder 3

| | |
|---|---------------------------------|
| 0 | Nicht speichern |
| 1 | Speichern in Symbol Table Datei |
| 2 | Speichern in UXCROSS |
| 3 | Speichern in UXCROSS und Datei |

- ⇒ Wenn UXCROSS existiert kann die “Cross-Ref. Utility” (UDE) verwendet werden

Cross Reference

Cross Reference Utility



The 'Edit Cross Reference' dialog box is shown. It has a title bar with standard window controls. The main area is divided into several sections:

- Profile:** Contains 'Object Type' (a list of checkboxes: Components, Startup Shells, Menus, Global Proc, Panels) and 'Object Name Profile' (a text input field).
- Library:** A text input field.
- Language:** A text input field.
- Import:** A section with the text 'Import cross-reference data from symbol tables using the set profile.' and a checkbox 'Import data for an object only if it exists in the Repository'. Below is an 'Import' button.
- Delete:** A section with the text 'Delete cross-reference data retrieved by the profile.' and a checkbox 'Delete data for an object only if it does not exist in the Repository'. Below is a 'Delete' button.
- Buttons:** At the bottom right, there are 'View...' and 'Close' buttons. The 'View...' button is circled in blue.

Cross Reference

Repository View

Repository View - Cross-reference

Cross-reference

Retrieve Profile

Reference Type: (All) | Object Type: (All)

Reference: | Object: |

Entity or Library: | Library: |

Application Model: | Language: |

Reference

| Type | Name | Referenced By | Object Type | Object | Trigger | Line |
|------|------|---------------|-------------|--------|---------|------|
| | | | | | | |

Repository View - Cross-reference

Cross-reference

Retrieve Profile

Reference Type: Component | Object Type: (All)

Reference: ART_READER_SVC | Object: |

Entity or Library: | Library: |

Application Model: | Language: |

Reference

| Type | Name | Referenced By | Object Type | Object | Trigger | Line |
|-----------|--|------------------------------------|-------------|----------------|------------|------|
| Component | ART_READER_SVC.CHARACTERS (Declaration) | Operation CHARACTERS | Component | ART_READER_SVC | Operations | 109 |
| Component | ART_READER_SVC.ENDDOCUMENT (Declaration) | Operation ENDDOCUMENT | Component | ART_READER_SVC | Operations | 49 |
| Component | ART_READER_SVC.ENDELEMENT (Declaration) | Operation ENDELEMENT | Component | ART_READER_SVC | Operations | 93 |
| Component | ART_READER_SVC.ERROR (Declaration) | Operation ERROR | Component | ART_READER_SVC | Operations | 148 |
| Component | ART_READER_SVC.FATALERROR (Declaration) | Operation FATALERROR | Component | ART_READER_SVC | Operations | 155 |
| Component | ART_READER_SVC.GETARTICLES (Declaration) | Operation GETARTICLES | Component | ART_READER_SVC | Operations | 4 |
| Component | ART_READER_SVC.STARTDOCUMENT (Declaration) | Operation STARTDOCUMENT | Component | ART_READER_SVC | Operations | 41 |
| Component | ART_READER_SVC.STARTELEMENT (Declaration) | Operation STARTELEMENT | Component | ART_READER_SVC | Operations | 55 |
| Component | ART_READER_SVC.WARNING (Declaration) | Operation WARNING | Component | ART_READER_SVC | Operations | 141 |
| Component | ART_READER_SVC.ZPROCERROR (Declaration) | Operation ZPROCERROR, Include Proc | Component | ART_READER_SVC | Operations | 1 |
| Component | ART_READER_SVC.GETARTICLES (Activate) | BUT.DUMMY.DUMMY | Component | DEMO_XML_READ | <Detail> | 10 |
| Component | ART_READER_SVC.GETARTICLES (Activate) | BUT.DUMMY.DUMMY | Component | DEMO_XML_WRITE | <Detail> | 10 |

Wird die Global Proc 'CROSS_GPRC' in meiner Anwendung noch verwendet?

Repository View - Cross-reference

Cross-reference

Retrieve Profile

| | | | |
|-------------------|-------------|-------------|-------|
| Reference Type | Global Proc | Object Type | (All) |
| Reference | CROSS_GPRC | Object | |
| Library | | Library | |
| Application Model | | Language | |

-Reference

| Type | Name | Referenced By | Object Type | Object | Trigger | Line |
|-------------|---------------------|---------------|-------------|-----------------|---------|------|
| Global Proc | RT_CROSS:CROSS_GPRC | | Component | CU2008_CROSSREF | Execute | 33 |

Welche Include Procs verwendet die Komponente 'CU2008_LISTING_2' ?

Repository View - Cross-reference

Cross-reference

Retrieve Profile

| | | | |
|-------------------|---------|-------------|------------------|
| Reference Type | Include | Object Type | Component |
| Reference | | Object | CU2008_LISTING_2 |
| Entity or Library | | Library | |
| Application Model | | Language | |

-Reference

| Type | Name | Referenced By | Object Type | Object | Trigger | Line |
|---------|-------------------------|----------------------------|-------------|------------------|--------------------|------|
| Include | LST1:RT_CROSS (Include) | Entry LINCLUDE | Component | CU2008_LISTING_2 | Local Proc Modules | 44 |
| Include | LST2:RT_CROSS (Include) | | Component | CU2008_LISTING_2 | Local Proc Modules | 48 |
| Include | LST3:RT_CROSS (Include) | Entry RT_CROSS_GPRC | Component | CU2008_LISTING_2 | Local Proc Modules | 41 |
| Include | LST4:RT_CROSS (Include) | | Component | CU2008_LISTING_2 | Local Proc Modules | 51 |
| Include | LST4:RT_CROSS (Include) | Include Proc RT_CROSS:LST5 | Component | CU2008_LISTING_2 | Local Proc Modules | 5 |
| Include | LST5:RT_CROSS (Include) | Include Proc RT_CROSS:LST4 | Component | CU2008_LISTING_2 | Local Proc Modules | 2 |
| Include | OPER:RT_CROSS (Include) | | Component | CU2008_LISTING_2 | Operations | 20 |

Neue Command Line Switches

- ❑ /sym
Specify whether to generate symbol tables, and where they should be located
- ❑ /cpt
compile all components
- ❑ /plg
puts messages in the specified log file
- ❑ /NoSubDir
Exclude subdirectories from the file manipulation operation subswitch for the Resource Manager (URM)

Neue Assignment Settings

□ [RESOURCES] – Section

□ \$RESOURCES_OUTPUT

□ \$SEARCH_RESOURCES

□ \$SYMBOLTABLE

□ \$LISTINGLEVEL

□ \$PROMPT_SCROLL

Logical Path Definitionen

\$RSO

\$RES

\$UDE -Erweiterungen

- ❑ \$UDE wurde mit Uniface 9.1 eingeführt
- ❑ bearbeitet Daten im Repository

Uniface 9.3

- compile
- copy
- export
- import misc

- *delete*
- *exist*
- *load*
- *import symboltable*
- *getReferenceList*

\$UDE –Erweiterungen

\$ude delete

dient zum Löschen von Laufzeitobjekten, Symboltabellen und Proc Listings.

\$ude ("delete" , " Type ; ObjectType " , ObjectProfile , "" {, OptionList})

- *Type :*
Art der Information; (*resources_output, symbolTable, oder listing*)
- *ObjectType :*
gewünschter Objekttyp; (*application, component, form, menu, ...*)
- *ObjectProfile :*
Objektname oder Suchprofile (*“My_Form”*)
- *OptionList :*
Assoziative Liste mit ObjectType spezifischen Ergänzungen
(z. B. *“library=DemoLib”*)

\$ude ("delete" , " resource_output ;component ;form" , “My_Form“)
Löscht die Form „My_Form“ aus dem ResourceOutput-Pfad (\$RSO)

Überprüft die Existenz von Laufzeitobjekten, Symboltabellen und Proc Listings.

```
$ude ( "exist" , " Type : ObjectType " , ObjectProfile , "" {, OptionList} )
```

- *Type :*
Art der Information; (*resources_output, symbolTable, oder listing*)
- *ObjectType :*
gewünschter Objekttyp; (*application, component, form, menu, ...*)
- *ObjectProfile :*
Objektname (*"menu1"*)
- *OptionList :*
Assoziative Liste mit ObjectType spezifischen Ergänzungen
(z. B. *"library=DemoLib"*)

```
$Return$=$ude("exist","symboltable;panel", "menu1", "", "library=MyLib")
```

```
$Return$=$ude("exist","listing;proc", "menu1", "", "library=MyLib")
```

```
$Return$=$ude("exist","resources_output;menu", "menu1", "", "library=MyLib;language=usa"
```

Laden einer Symboltabelle oder eines Proc Listings in ein Feld / eine Variable.

```
$ude ( "load" , " Type : ObjectType " , ObjectProfile , "" {, OptionList} )
```

- *Type :*
Art der Information; (*symbolTable*, oder *listing*)
- *ObjectType :*
gewünschter Objekttyp; (*application*, *component*, *form*, *menu*, ...)
- *ObjectProfile :*
Objektname ("*menu1*")
- *OptionList :*
Assoziative Liste mit ObjectType spezifischen Ergänzungen
(z. B. "*library=DemoLib*")

```
vListing = $ude("Load", "Listing-;Component", $NAME$, "", "")
```

\$UDE –Erweiterungen

\$ude getReferenceList

Liest die Liste der Laufzeitobjektreferenzen eines ausgewählten Objektes

```
$ude ( "getReferenceList" , " symboltable ; ObjectType " , ObjectProfile ,  
      "" {, OptionList} )
```

- *ObjectType* :
gewünschter Objekttyp; (*application, component, form, menu, ...*)
- *ObjectProfile* :
Objektname oder Suchprofile (*"My_Form"*)
- *OptionList* :
Assoziative Liste mit ObjectType spezifischen Ergänzungen
(z. B. *"library=DemoLib"*)

```
$result=$ude("getReferenceList","symboltable;form", "UM1_START","","")
```

\$UDE –Erweiterungen

\$ude import symboltable

Importiert eine Symboltabelle in das Repository (UXCROSS.DICT)

```
$ude ( "import" , " symboltable {; ObjectType} " , ObjectProfile , ""  
    {, OptionList} )
```

- *ObjectType* :
gewünschter Objekttyp; (*application, component, form, menu, ...*)
- *ObjectProfile* :
Objektname oder Suchprofile (*"My_Form"*)
- *OptionList* :
Assoziative Liste mit ObjectType spezifischen Ergänzungen
(z. B. *"library=DemoLib"*)

```
$status$ = $ude("Import", "Symboltable;Menu", "UM_STARTBAR", "",  
    "Library=UM_LIB;Language=USA")
```



\$LABELPROPERTIES

Function zum Setzen und Holen von Labeltexten

\$labelproperties (FieldName) = "text= LabelText "

;Execute trigger

show

\$labelproperties (ABBREVIATION) = "text=Initials"

\$labelproperties (FULLNAME) = "text=Employee Name"

edit

Email enhancement

- **Unicode-Unterstützung**

- im Nachrichtentext und
 - der Betreff-Angabe
- von gesendeten und erhaltenen Nachrichten

- **SMTP Authentication Unterstützung**

via Security Drivers – Verwendung von UPOPUPMAIL

- SetSecurity Operation
- GetSecurity Operation
- LogonSMTP Operation
- SendMail Operation



neu



geändert



Zeit für Fragen