



# ***IET***

## ***Product Update***

***October 2009***



## **Agenda**

- ▲ Product Overview
- ▲ VerifEr
- ▲ Release 7.8
- ▲ xTrace 2.2 / 2.3
- ▲ Q&A

## IET Products



**GuardIEn**  
Life-Cycle Management



**Object List+**  
Encyclopaedia Browsing



**XOS**  
Manage External Objects



**IETeGUI**  
Gen GUI Enhancer



**Assistants**  
Developer Productivity Tools



**xTrace**  
Advanced tracing for z/OS



**genIE**  
Direct PAD Editing & Plug-ins

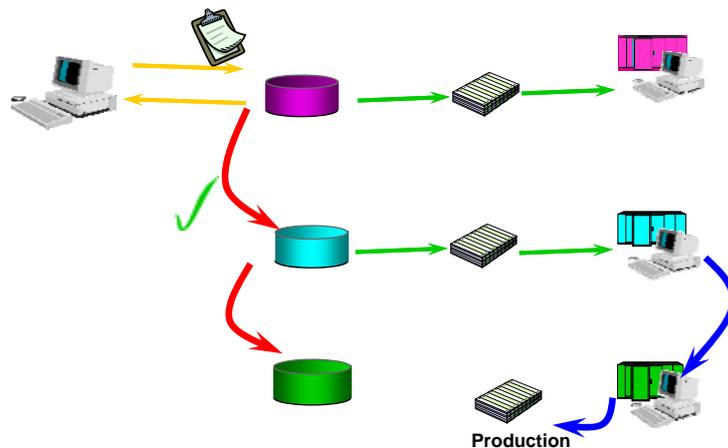


**VerifEr**  
Automated QA

3

Copyright © IET Ltd 2009

## Complete Automation for CA Gen



4

Copyright © IET Ltd 2009



Automated code checking and QA for CA Gen

5

Copyright © IET Ltd 2009

## Key Features



- ▲ Standard Checks
- ▲ Configurable
- ▲ Multiple levels of checking
- ▲ Checks integrated into the Development Process
- ▲ Accesses both the Encyclopaedia and Toolset
- ▲ On-line and Batch Check Execution

6

Copyright © IET Ltd 2009

## Standard Checks



- ▲ Developed and Maintained by IET
  - ▲ ~ 110 checks currently available
- ▲ Examples
  - ▲ Naming Standards
    - ▲ Action Blocks, Views, Packaging, etc.
  - ▲ Coding Standards
    - ▲ Return code checking, group view types, etc.
  - ▲ Performance
    - ▲ SQL Efficiency, View Matching, Use of Functions, etc.
  - ▲ User Interface Standards
    - ▲ Help Ids, Tab Sequencing, Colours, Sizes, etc.
  - ▲ CBD Architecture Standards
    - ▲ Tiering, Standards, etc.
  - ▲ Audit Checks
    - ▲ SOX compliance checks

7

Copyright © IET Ltd 2009

## Configurable



- ▲ Many Standard Checks are parameterised
  - ▲ Parameter values stored in the database and configurable by project, model, release, etc.
- ▲ IET customisation service
  - ▲ IET can develop site specific checks to your requirements
- ▲ User customisation facility
  - ▲ Custom development kit enables you to develop checks using Gen as the development tool

8

Copyright © IET Ltd 2009

## Multiple levels of checking



- ▲ Entire Model(s)
- ▲ Selected Objects
  - ▲ Ad-hoc selection
  - ▲ Objects changed during an upload
  - ▲ Change Request Content
  - ▲ Release Pack Content
  - ▲ System Update Scope
- ▲ Object Classification enables checks to be limited to certain types of objects, for example:
  - ▲ Interface Action Blocks
  - ▲ External Action Blocks

9

Copyright © IET Ltd 2009

## Integrated into the Development Process



- ▲ Enables checks to be easily performed at key points in the development life-cycle
  - ▲ On Upload
  - ▲ Pre Migrate
  - ▲ End of Phase
  - ▲ Integral within the System Updating process
- ▲ Verification can be made mandatory

10

Copyright © IET Ltd 2009

## Accesses both the Encyclopaedia and Toolset



- ▲ Direct Access to the host and client/server encyclopaedia
  - ▲ Check the contents of the models
  - ▲ On-line or Batch execution
- ▲ Toolset Plug-in
  - ▲ Check the contents of the local .dat files
  - ▲ Allows verification prior to upload
- ▲ On-line and Batch Check Execution

11

Copyright © IET Ltd 2009

## Benefits



- ▲ Automated checking reduces time & effort spent on verification
- ▲ Checks can be performed multiple times, thus catching errors early
- ▲ Toolset plug-in allows checking before upload
- ▲ Checks can be performed by non-experts
- ▲ Enables checks that would be impractical to perform manually
- ▲ Integration with GuardIEn:
  - ▲ Verification on upload provides immediate notification of errors.
  - ▲ Checks performed as an integral part of the development life-cycle
  - ▲ Extends the scope of checks to include configuration management and audit requirements

12

Copyright © IET Ltd 2009

# Release 7.8



- ▲ Major new features across the board...
  - ▲ GuardIEn
  - ▲ genIE
  - ▲ Object List+
  - ▲ VerifIEr
  - ▲ ~ 200 enhancements

# GuardIEn 7.8



- ▲ Code Review Notes
- ▲ Change Capture failures remembered
- ▲ Release & Environment Preparation Wizard
- ▲ New Report Browser

```

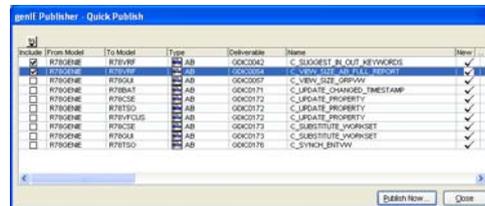
PAD Editor - CAP10091_CORE_APPLES_IET016_FAR_(FRUITDEV)
File Edit (genIE) View Code Review Options Help
5 | WHILE icl_group IS NOT FULL
6 | SET SUBSCRIPT OF icl_group TO LAST OF icl_group + 1
Code Review Note 334: Severity 2 Status 3 Version 1 Origin VERIFIED TEST04
The view matching is not perfect for the USE at statement 00007
Code Review Note 337: Severity 2 Status 2 Version 1 Origin VERIFIED TEST02
The return code is not tested after the USE at statement 00007
7 | USE dap10091_switch_apple_test041_test1
8 |
9 | WHICH IMPORTS: Entity View icl_grp ap101_apple TO Entity View in ap101_apple
10 | Work View in isaai_standard_input TO Work View in isaai_standard_input
11 | WHICH EXPORTS: Entity View icl_grp ap101_apple FROM Entity View out ap101_apple
12 | Work View out isaai_standard_output FROM Work View out isaai_standard_out
13 |
14 | IF out isaai_standard_output reason_code = 0
15 | SET out isaai_standard_output reason_code TO 0
16 |
17 |
18 | SET LAST OF out_group TO 0
19 | FOR SUBSCRIPT OF icl_group FROM 1 TO LAST OF icl_group BY 1
Code Review Note 334: Severity 2 Status 0 Version 1 Origin VERIFIED TEST02
Undesired statement SET SUBSCRIPT TO SUBSCRIPT + 1 found for Group View OUT_GROUP at statement: 00011
20 | SET SUBSCRIPT OF out_group TO SUBSCRIPT OF out_group + 1
Code Review Note 335: Severity 2 Status 2 Version 1 Origin VERIFIED TEST03
Incorrect SUBSCRIPT limit checking for Group View: OUT_GROUP
21 | MOVE icl_grp ap101_apple TO out_grp ap101_apple
22 |
23 | IF SUBSCRIPT OF out_group = 1000
24 |
25 |

```

# genIE 7.8



- ▲ Removed use of CSE Update API
- ▲ Powerful Functions
  - ▲ Property Updates
  - ▲ Work Set Substitution
  - ▲ View Synchronisation & Matching
  - ▲ Operation Version Creator
  - ▲ USE Substitution
- ▲ Plug-in Expression Builder
- ▲ Quick Publish



15

# Object List+ 7.8



- ▲ XOS Support
- ▲ 'Favourite' Object Types
- ▲ Search for AB & PROC at the same time
- ▲ BETWEEN search condition
- ▲ New functions:
  - ▲ Full upward calling chain function
  - ▲ Data mapping
- ▲ Toolset support via genIE Plug-in

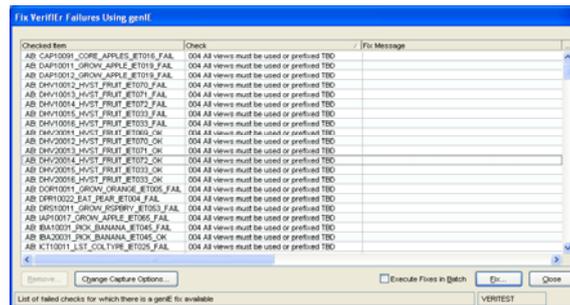
16

Copyright © IET Ltd 2009

## VerifEr 7.8



- ▲ Fix with genIE
- ▲ Generate Code Review Notes



17

Copyright © IET Ltd 2009

## xTrace



- ▲ Release 2.2 (June 2008)
  - ▲ Breakpoint enhancements
  - ▲ IMS support
  - ▲ Rollback option
  - ▲ Source Code Post Processor
    - ▲ Improves runtime performance when not actively tracing
- ▲ Release 2.3 (Q3 2009)
  - ▲ Value breakpoint on attribute changing value
  - ▲ xTservice on z/OS

18

Copyright © IET Ltd 2009