

QA Console Product Features

The QA Console is an automated quality assurance tool for CA Gen allowing project administrators to enforce object and coding standards simply and effectively via automated reviews. The emphasis of the QA Console is squarely on putting the user in control. It incorporates a mix of universally applicable Base Checks with the ability to develop Custom Checks within the same framework, giving users the freedom to develop their own unique and complete CA Gen compliance solution without reliance on third parties.

As an extension to the Access Gen Windows software, it is available for both the Host and Client Server Encyclopedia and takes advantage of the base software's existing search and reporting format to identify objects for review and then output the QA review outcomes in a report or tabular format.

During its development, Response Systems canvassed a cross section of customers to see what sort of standards were enforced. It became obvious that there were some common themes but also, despite using the same core software, standards are very different from site to site and unique to each project. Giving each customer a complete bespoke solution was simply not possible - but of course that is what was being demanded!

The architecture has been developed to accommodate the two types of checks so they can operate side by side.

Base Checks

The QA Console is supplied with a set of Base Checks covering common CA Gen development review standards. These can be configured based on individual requirements. The QA Console architecture allows for the expansion of Base Checks without the need to re-install the Access Gen software. There will be ongoing development to expand these based on customer feedback, with the emphasis being on checks applicable to all CA Gen development. They will be distributed via periodic updates available from the Support Centre of Response Systems' website.

Custom Checks

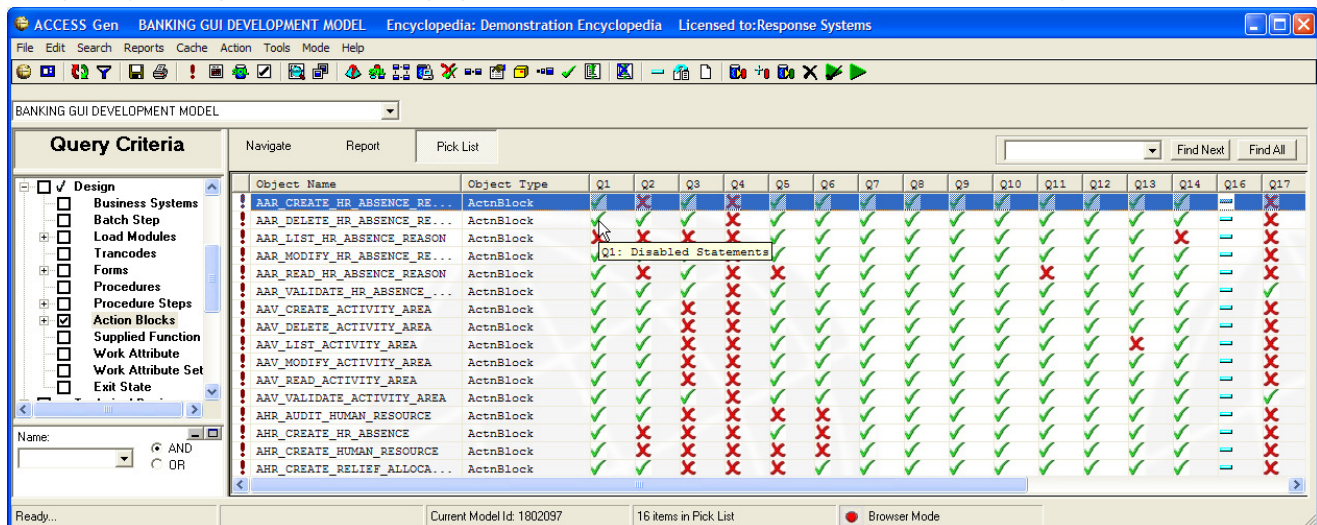
The Base Checks can be augmented with custom written checks that can be incorporated into the QA Framework. These are developed using a Software Development Kit (SDK) supplied with the base software. The SDK provides all of the necessary tools to create and maintain Custom QA Checks using the CA Gen workstation toolset. Customers can therefore leverage their own existing development skills without the need to engage specialist technical services.

The SDK includes a Template CA Gen model corresponding to the customer Schema level and a Test Harness application that can be used to unit test Custom Checks against encyclopedia data prior to deployment.

QA Review Outcomes

The existing Access Gen GUI provides for several ways to search for objects of interest. Once they are located, QA Review features become available returning their outcomes in one of three ways.

QA Report (Summary) – A summary report where multiple Base or Custom checks can be run simultaneously against multiple objects. A pass/fail matrix displays the outcome of the selected checks for the listed objects.



The screenshot shows the QA Console interface with a 'Query Criteria' sidebar on the left and a main table of results. The table has columns for Object Name, Object Type, and 17 quality checks (Q1-Q17). The results are displayed as green checkmarks for passes and red X's for failures. A tooltip for Q1 indicates 'Disabled Statements'.

Object Name	Object Type	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q16	Q17
AAR_CREATE_HR_ABSENCE_RE...	ActnBlock	✓	✗	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AAR_DELETE_HR_ABSENCE_RE...	ActnBlock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AAR_LIST_HR_ABSENCE_REASON	ActnBlock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AAR_MODIFY_HR_ABSENCE_RE...	ActnBlock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AAR_READ_HR_ABSENCE_REASON	ActnBlock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AAR_VALIDATE_HR_ABSENCE...	ActnBlock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AAV_CREATE_ACTIVITY_AREA	ActnBlock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AAV_DELETE_ACTIVITY_AREA	ActnBlock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AAV_LIST_ACTIVITY_AREA	ActnBlock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AAV_MODIFY_ACTIVITY_AREA	ActnBlock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AAV_READ_ACTIVITY_AREA	ActnBlock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AAV_VALIDATE_ACTIVITY_AREA	ActnBlock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AHR_AUDIT_HUMAN_RESOURCE	ActnBlock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
AHR_CREATE_HR_ABSENCE	ActnBlock	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AHR_CREATE_HUMAN_RESOURCE	ActnBlock	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
AHR_CREATE_RELIEF_ALLOCA...	ActnBlock	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

QA Report (Detailed) – A detailed report that gives additional contextual information about the outcome of Base or Custom checks against objects. This can be run for individual or multiple objects simultaneously.

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ACCESS GEN                                QA Check Detail Report                                2008/07/04

Rule Set Description:
Description: Demonstration Rule Set
Created By: Malcolm Foort
Created On: 04.07.08

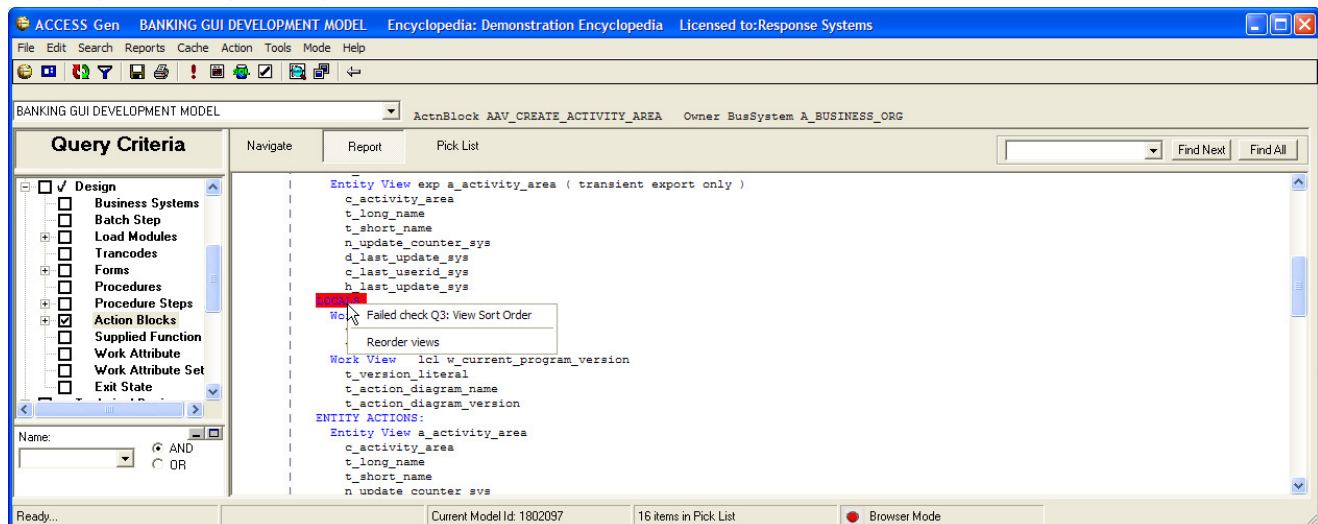
List Definitions:
t01:Aann*A4%%*aann
103:TBD*ZZDEL*ZZ_DEL

The following checks have been selected:
  Disabled Statements
  Unused Views
  View Sort Order
  Naming Standard
  Unreferenced Views
  Indentation Limit
  Trim Function On Var Len Attrs
-----
Object Type: ActnBlock
Object Name: B11004W_COUNTRY_CNVRT_WRAPPER_S

Disabled Statements      - Passed
Unused Views            - Passed
View Sort Order         - Imports Failed
View Sort Order         - Exports Failed
View Sort Order         - Locals Passed
View Sort Order         - Entity Actions Passed
Naming Standard Check   - Failed - Check Type: BEGINS TEMPLATE Section No:ANY Check String(s):t01;
Unreferenced Views     - Failed (1 indirectly referenced)
  Indirectly Referenced Import View      in eww_supplied
Indentation Limit      - Passed
Trim Function On Var Len Attrs - Passed
-----
End of Report
  
```

QA Browse – This is a unique feature to the QA Console. It works with the Base Checks and is used to display Action Diagrams highlighting the statements that have failed any Action Diagram QA checks. For certain checks, the QA Browse also offers an Automated Correction Facility*. This provides the option to correct the failed QA check without the need to download the object. For example, where an entire view is identified as unused (not referenced in the logic of an action diagram, placed on an associated screen or dialog flow, or used in view matching) and the action block/procedure step is not checked out (in modify or above), there is an option to delete it.

Using the QA Browse to correct failed QA Checks updates the last updated timestamp and user id in the same way as if the object is changed using the CA Gen toolset.



QA Configuration Utility

To support the management and configuration of QA checks, a configuration utility is supplied with the software. This stand alone executable can be used by project administrators to enable or disable checks, register custom QA Checks that are ready for deployment and/or configure checks with the input parameters that define how they are applied.

* Automated Correction Facility available for CSE Installations only