

# Quality Control Checks Documentation

## Overview

This **Quality Control (QC) Tool** is designed to run a series of checks on digital assets across different departments (such as Modeling, Rigging, and Animation) within a production pipeline. It reports any issues or warnings and offers the user the option to automatically fix these issues, rerun the checks, or publish the asset despite any unresolved problems.

The tool provides a user interface (UI) within Maya, making it easy for users to view failed checks, warnings, and passed checks, and to take appropriate action before asset publishing.

### Main Features:

- **Department-specific Checks:** Runs a variety of QC checks depending on the department (e.g., Modeling, Rigging, Animation).
  - **Report Generation:** Displays a report summarizing the checks, including pass, warning, and fail counts.
  - **Automatic Fixes:** Allows users to automatically resolve issues identified during the checks.
  - **Manual Selection:** Users can rerun checks selectively on specific items.
  - **Publishing:** Assets can be published even if some checks have failed, depending on the user's discretion.
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## Installation

To use the tool, ensure that it is integrated within Maya. The tool relies on external modules for each department's checks and imports them dynamically during runtime.

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## Usage

### Launching the Tool

1. **Initialize the Tool:**
  - The QC tool can be initiated from Maya by loading the UI via the QCChecks class, which loads the user interface and presents available checklists.
2. **Parenting the UI:**
  - The UI is parented to Maya's main window for a seamless user experience.

## User Interface Overview

The UI consists of the following elements:

- **Fix This Button:** Automatically fixes selected issues.
- **Department Dropdown Menu:** Allows selection of departments (Modeling, Rigging, Animation).
- **QC List Widget:** Displays the list of available QC checks.
- **Run Selected Button:** Runs checks on selected items.
- **Status Labels:** Displays the number of passed, warning, and failed checks.
- **Results Window:** Displays detailed results from each QC check.
- **Selection Buttons:** Allows users to select all, deselect all, or invert the selection of QC checks.
- **Publish Button:** Publishes the asset after running or fixing the QC checks.

## Running Checks

### 1. Selecting a Department:

- Choose the relevant department from the dropdown menu (e.g., Modeling).

### 2. Selecting QC Checks:

- Select which checks to run from the checklist provided in the QC List Widget.

### 3. Running the QC Checks:

- Click the **Run Selected** button to run the selected QC checks for the chosen department. Results will be displayed in the **Results Window**.

### 4. Fixing Issues:

- If any issues are detected, click the **Fix This** button to automatically fix the selected issues. If the tool cannot fix the issue, a warning or failure will remain, requiring manual intervention.

### 5. Viewing Results:

- The **Results Window** will display a summary of the check results, detailing which checks passed, triggered warnings, or failed.
- The **Passed**, **Warning**, and **Failed** labels will update based on the results.

### 6. Publishing the Asset:

- After running the checks and resolving any issues, click the **Publish** button to save and publish the asset.
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# Quality Control Modules

The tool supports different checks depending on the department:

## Modeling Department

- **Animated Objects Check:** Verifies that no unexpected animations exist on objects within the scene.
- **Center Check:** Ensures that all objects are centered correctly.
- **Freeze Transform Check:** Verifies that transforms are frozen on objects where required.
- **Scene Cleanup Check:** Ensures that the scene is free of unnecessary nodes or illegal elements.

## Rigging Department

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## Animation Department

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