Robust Control Toolbox Release Notes

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Summary by Version

This table provides quick access to what's new in each version. For clarification, see "Using Release Notes".

| Version (Release) | New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|-----------------------------------|-----------------------------|--|----------------------------------|---|
| Latest Version V3.3.1 (R2008a) | Yes Details | No | No bug fixes | Printable Release Notes: PDF Current product documentation |
| V3.3 (R2007b) | No | No | No bug fixes | No |
| V3.2 (R2007a) | Yes Details | No | No bug fixes | No |
| V3.1.1 (R2006b) | Yes Details | No | No bug fixes | No |
| V3.1 (R2006a) | No | No | No bug fixes | No |
| V3.0.2 (R14SP3) | No | No | No bug fixes | No |
| V3.0.1 (R14SP2) | Yes Details | No | No bug fixes | No |

Using Release Notes

Use release notes when upgrading to a newer version to learn about:

- New features
- Changes
- Potential impact on your existing files and practices

Review the release notes for other MathWorksTM products required for this product (for example, MATLAB[®] or Simulink[®]) for enhancements, bugs, and compatibility considerations that also might impact you.

If you are upgrading from a software version other than the most recent one, review the release notes for all interim versions, not just for the version you are installing. For example, when upgrading from V1.0 to V1.2, review the release notes for V1.1 and V1.2.

What's in the Release Notes

New Features and Changes

- New functionality
- Changes to existing functionality

Version Compatibility Considerations

When a new feature or change introduces a reported incompatibility between versions, the **Compatibility Considerations** subsection explains the impact.

Compatibility issues reported after the product is released appear under Bug Reports at the MathWorks Web site. Bug fixes can sometimes result in incompatibilities, so you should also review the fixed bugs in Bug Reports for any compatibility impact.

Fixed Bugs and Known Problems

The MathWorks offers a user-searchable Bug Reports database so you can view Bug Reports. The development team updates this database at release time and as more information becomes available. This includes provisions for any known workarounds or file replacements. Information is available for bugs existing in or fixed in Release 14SP2 or later. Information is not available for all bugs in earlier releases.

Access Bug Reports using your MathWorks Account.

Version 3.3.1 (R2008a) Robust Control Toolbox™ Software

This table summarizes what's new in Version 3.3.1 (R2008a):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|-----------------------------|--|----------------------------------|---|
| Yes Details below | No | No bug fixes | Printable Release Notes: PDF Current product documentation |

New features and changes introduced in this version are described here.

Ability to Use LOOPMARGIN with Simulink

This version of Robust Control Toolbox TM software lets you analyze the robustness of nonlinear Simulink $^{\circledR}$ models using the LOOPMARGIN command.

If you have the Simulink® Control Design TM product installed, you can perform stability margin analysis of a Simulink model by passing the model name and a point within that model to the LOOPMARGIN command.

Version 3.3 (R2007b) Robust Control Toolbox™ Software

This table summarizes what's new in Version 3.3 (R2007b):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|-----------------------------|--|----------------------------------|-----------------------------------|
| No | No | No bug fixes | No |

Version 3.2 (R2007a) Robust Control Toolbox™ Software

This table summarizes what's new in Version 3.2 (R2007a):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|-----------------------------|--|----------------------------------|--------------------------------------|
| Yes Details below | No | No bug fixes | No |

New features and changes introduced in this version are described here.

New Simulink Blocks

- USS System—This Robust Control Toolbox™ version introduces a new Simulink® block, USS System. You can use this block to import uncertain systems into Simulink models.
- Multiplot Graph—Plot multiple signals in one figure.

Version 3.1.1 (R2006b) Robust Control Toolbox™ Software

This table summarizes what's new in Version 3.1.1 (R2006b):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|-----------------------------|--|----------------------------------|--------------------------------------|
| Yes Details below | No | No bug fixes | No |

New Function Itiarray2uss

This Robust Control Toolbox TM version introduces a new function, ltiarray2uss. This function constructs an uncertain state-space model from an LTI array.

Version 3.1 (R2006a) Robust Control Toolbox™ Software

This table summarizes what's new in Version 3.1 (R2006a):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|-----------------------------|--|----------------------------------|--------------------------------------|
| No | No | No bug fixes | No |

Version 3.0.2 (R14SP3) Robust Control Toolbox™ Software

This table summarizes what's new in Version 3.0.2 (R14SP3):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|-----------------------------|--|----------------------------------|--------------------------------------|
| No | No | No bug fixes | No |

Version 3.0.1 (R14SP2) Robust Control Toolbox™ Software

This table summarizes what's new in Version 3.0.1 (R14SP2):

| New Features and Changes | Version Compatibility Considerations | Fixed Bugs and Known Problems | Related Documentation at Web Site |
|-----------------------------|--|----------------------------------|--------------------------------------|
| Yes Details below | No | No bug fixes | No |

New features and changes introduced in this version are described here:

mussvunwrap Is Renamed

mussvunwrap has been renamed. It is now called mussvextract.

New Functions actual2normalized and normalized2actual

This Robust Control ToolboxTM version introduced two new functions:

- actual2normalized Calculate normalized distance between nominal value and given value for uncertain atom.
- normalized2actual Convert value for atom in normalized coordinates to corresponding actual value.

Compatibility Summary for Robust Control Toolbox $^{\mathrm{IM}}$ Software

This table summarizes new features and changes that might cause incompatibilities when you upgrade from an earlier version, or when you use files on multiple versions. Details are provided with the description of the new feature or change.

| Version (Release) | New Features and Changes with Version Compatibility Impact |
|-----------------------------------|--|
| Latest Version V3.3.1 (R2008a) | None |
| V3.3 (R2007b) | None |
| V3.2 (R2007a) | None |
| V3.1.1 (R2006b) | None |
| V3.1 (R2006a) | None |
| V3.0.2 (R14SP3) | None |
| V3.0.1 (R14SP2) | None |