Ansys Granta MI 2021 R2

MI Scripting Toolkit 2.3 for Python

Release Notes

Ansys / GRANTA MI

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1 About this release

This release of the MI Scripting Toolkit for Python includes a number of enhancements and bug fixes. It is pip-installable on all supported operating systems and supports Python 3.6 and above.

There are new and reworked sample scripts for the Streamlined API to familiarize you with new features.

For information about prerequisites and installation, see the separate document *MI Scripting Toolkit for Python Overview and Installation*, included in the download package.

2 What's New?

Key features introduced or improved in this release.

2.1 Extended platform support

MI Scripting Toolkit now has a *SUSE Enterprise 15* installer. This release has also been certified on *Cygwin 3.1.7-1*.

2.2 Integration with new MI import services

Create asynchronous import jobs and interact with the Job Queue via the MI Scripting Toolkit. Requires MI 2020 R2 or later.

2.3 Fetch records linked via tabular data

Use Association Chains to find and fetch linked records, with the ability to specify a chain or the link direction.

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3 Enhancements and bug fixes

3.1 Streamlined Layer

- Functional data attributes now support optional parameters (empty values or columns in functional data objects).
- Pseudo-attribute subsets now fully supported by the MI Scripting Toolkit.
- Users can now check whether an attribute is single- or multi-valued; previously this was only flagged by an exception raised when updating the record on the server.
- Binary data in File and Picture attributes is now accessible through the `binary_data` property.
- Records can now be searched using exact short-text attributes with the method `Table.get_record_by_lookup_value()`.
- Hyperlink attributes now have accessible and settable display type and description properties.
- Support added for Not Applicable attributes (the `isApplicable` flag can be set through the MI Scripting Toolkit).
- `Record.all_children()` now returns a list of records, rather than a `TreeIterator` object.

3.2 Foundation Layer

- `LookupValue` added to `RecordReference` to support exact short-text attribute searches.
- Support for pseudo-attribute subsets added.
- `GetAssociatedRecords` response and request added to support association chains.

4 Backwards incompatible API changes

Version 2.2 and 2.1 scripts should work without modification. However, we recommend changing scripts using File or Picture `load()` or `save()` methods in preparation for a pending deprecation:

- **Old behavior (may not be supported in future releases):** The `path` argument for File and Picture `save()` and `load()` methods contains the folder path to the file, and the `file_name` argument contains the file name and extension.
- **New behavior:** The `path` argument contains the file path with file name and extension. The `file_name` argument is no longer necessary.

Version 2.0 scripts may need to be modified to take account of the breaking changes identified in the Version 2.1 release. This information is also included in the *Upgrading from earlier versions* topic in the API documentation.

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