

# Ready for Workflow Goodness? How to upgrade!

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# Agenda

- What's the Workflow Initiative?
- What, why and who needs upgrading?
- How to upgrade

# Who am I?

- Dick Olsson
  - Long time Drupal core contributor
  - Working for Pfizer Inc.
  - Workflow Initiative coordinator
- Andrei Mateescu
  - Long time Drupal core contributor
  - Contracting for Pfizer Inc.
  - Workflow Initiative developer

# Workflow Initiative: Goals

- Improving content workflow capabilities
- Making full-site preview possible
- Major improvements to APIs:  
Entity, Revision and Translation API

# Workflow Initiative: Status

- Workflow module: Stable
- Content Moderation: Stable (but beta-ish)
- Workspace module: WIP
- Trash module: WIP
- More details:  
<https://events.drupal.org/node/18826>

# Revisions, revisions, revisions!

- Revisions are the foundation to all functionality built by the Workflow Initiative
- Upgrade **everything** to become revision-aware

# What to upgrade?

- Content entity types that are not revisionable
  - Contrib modules
  - Site-custom modules
- Other code and config that is not revision-aware
  - e.g. comment statistics

# Why upgrade?

- To moderate all editorial content
- To use full-site preview for all editorial content
- To stage content from one server to another
- **Existing content needs to be migrated**



# Who needs to upgrade?

- Maintainers of contrib modules
- Site owners with custom entity types and existing content

# Examples in contrib

- Paragraphs module
- Entity Queue module
- Look module

# How?

1. Change entity type and base field definitions
2. Update hook
3. Post-update hook

# Demo

- Converting Shortcut module
- ~13 KB patch (small)
- Has existing content after a standard install
- Fully documented process:  
<https://drupal.org/node/2908951>

1. Change entity type  
and base field definitions

```
+++ b/core/modules/shortcut/src/Entity/Shortcut.php
```

```
@@ -3,7 +3,7 @@
```

```
namespace Drupal\shortcut\Entity;
```

```
use Drupal\Core\Cache\Cache;
```

```
-use Drupal\Core\Entity\EntityInterface;
```

```
+use Drupal\Core\Entity\EditorialContentEntityBase;
```

```
use Drupal\Core\Entity\EntityStorageInterface;
```

```
use Drupal\Core\Entity\EntityTypeInterface;
```

```
use Drupal\Core\Field\BaseFieldDefinition;
```

```
@@ -31,13 +31,22 @@
```

```
*   },
```

```
*   base_table = "shortcut",
```

```
*   data_table = "shortcut_field_data",
```

```
+ *   revision_table = "shortcut_revision",
```

```
+ *   revision_data_table = "shortcut_field_revision",
```

```
*   translatable = TRUE,
```

```
*   entity_keys = {
```

```
*     "id" = "id",
```

```
+ *     "revision" = "revision_id",
```

```
*     "uuid" = "uuid",
```

```
*     "bundle" = "shortcut_set",
```

```
*     "label" = "title",
```

```
*     "langcode" = "langcode",
```

```
+ *     "published" = "status",
```

```
+ *   },
```

```
+ *   revision_metadata_keys = {
```

```
+ *     "revision_user" = "revision_user",
```

```
+ *     "revision_created" = "revision_created",
```

```
+ *     "revision_log_message" = "revision_log_message",
```

```
*   },
```

```
*   links = {
```

```
*     "canonical" = "/admin/config/user-interface/shortcut/link/{shortcut}",
```

```
@@ -48,7 +57,7 @@
```

```
*   bundle_entity_type = "shortcut_set"
```

```
* )
```

```
*/
```

```
-class Shortcut extends ContentEntityBase implements ShortcutInterface {
```

```
+class Shortcut extends EditorialContentEntityBase implements ShortcutInterface {
```

```
@@ -123,6 +132,7 @@ public static function baseFieldDefinitions(Entity`
    ->setDescription(t('The name of the shortcut.'))
    ->setRequired(TRUE)
    ->setTranslatable(TRUE)
+   ->setRevisionable(TRUE)
    ->setSetting('max_length', 255)
    ->setDisplayOptions('form', [
        'type' => 'string_textfield',
@@ -140,6 +150,7 @@ public static function baseFieldDefinitions(Entity`
    ->setLabel(t('Path'))
    ->setDescription(t('The location this shortcut points to.'))
    ->setRequired(TRUE)
+   ->setRevisionable(TRUE)
    ->setSettings([
        'link_type' => LinkItemInterface::LINK_INTERNAL,
        'title' => DRUPAL_DISABLED,
```

# 2. Update hook

- Copy/paste from the documentation
- <https://drupal.org/node/2908951#step2>



# 3. Post-update hook

```
+++ b/core/modules/shortcut/shortcut.post_update.php
@@ -0,0 +1,30 @@
+<?php
+
+/**
+ * @file
+ * Post update functions for the Shortcut module.
+ */
+
+use \Drupal\Core\Entity\Sql\SqlContentEntityStorageSchemaConverter;
+
+/**
+ * Update shortcuts to be revisionable.
+ */
+function shortcut_post_update_make_shortcut_revisionable(&$sandbox) {
+  $revisionableSchemaConverter = new SqlContentEntityStorageSchemaConverter(
+    'shortcut',
+    \Drupal::entityTypeManager(),
+    \Drupal::entityDefinitionUpdateManager(),
+    \Drupal::service('entity.last_installed_schema.repository'),
+    \Drupal::keyValue('entity.storage_schema.sql'),
+    \Drupal::database()
+  );
+
+  $revisionableSchemaConverter->convertToRevisionable(
+    $sandbox,
+    [
+      'title',
+      'link',
+    ]
+  );
+}
```

And don't forget...

```
[/var/www/html] # drush updb
```

```
The following updates are pending:
```

```
shortcut module :
```

```
8400 - Add the 'published' and revisionable metadata fields to shortcuts.
```

```
shortcut module :
```

```
Update shortcuts to be revisionable.
```

```
Do you wish to run all pending updates? (y/n): █
```

# Done!

More details: <https://drupal.org/node/2908951>

# Before

Edit ☆

[Home](#) » [Administration](#) » [Configuration](#) » [User interface](#) » [Shortcuts](#)

**Name \***

The name of the shortcut.

**Path \***

http://drupal.docker.localhost:8000

This must be an internal path such as */node/add*. You can also start typin

[Save](#) [Delete](#)

# After

Edit ☆

[Home](#) » [Administration](#) » [Configuration](#) » [User interface](#) » [Shortcuts](#)

**Name \***

The name of the shortcut.

**Path \***

http://drupal.docker.localhost:8000

This must be an internal path such as */node/add*. You can also start typ

**Revision log message**

Briefly describe the changes you have made.

**Current state:** Published

**Change to:**

[Save](#) [Delete](#)

# Who's currently upgrading?

- Core: Many content entity types being converted
- Multiversion: Upgrade path to make itself redundant WIP
- Workbench Moderation: Upgrade path WIP  
<https://drupal.org/project/wbm2cm>

# Credits

- <https://drupal.org/node/2721313>
- ~1 year long issue
- 150+ comments
- Multiple rewrites
- Thanks to amateescu, timmillwood et. al.!



Thank you!

# Questions?

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