



# Making the move from TYPO3 to Drupal







### Why were clients looking to migrate

- Small TYPO3 developer community compared to Drupal globally
- Expensive and slow maintenance/upgrade process
- Difficult to implement community oriented features
- Adding new functionality in Drupal is relatively easier and quicker
- Consolidation of all extensions into a single system
- Documentation has been scarce
- Enterprise support missing



### Where do we see TYPO3 standout?

- Hierarchical representation Page structure
- Flexibility in controlling access to content
- Internationalization
- Templating
- Backend for website administration



### Work

knr.gl – migration to OpenPublish



 eastwestcenter.org (primary partner - Forum One Communications)



TYPO3\_migrate module



### Concerns we heard

- What all content can be migrated?
- Can all digital assets be migrated?
- Can the user relationships with galleries, pages, blogs etc be maintained?
- Comments on articles and images?
- Can categories be migrated?
- Incremental migration be done?
- How much downtime?



### Migrate module

- Provides a flexible framework
- It is built for Drupal
- Supports core Drupal objects
- Supports migration from XML, JSON, CSV, Databases
- Incremental migrations
- Drush commands for import, listing, status, rollback etc
- Migrate UI



## TYPO3\_Migrate module

Migrating content from a TYPO3 website to Drupal using the Migrate module:

- Users(both frontend and backend).
- Standard typo3 pages along with their tt\_content elements.
- News(tt\_news) and news categories.



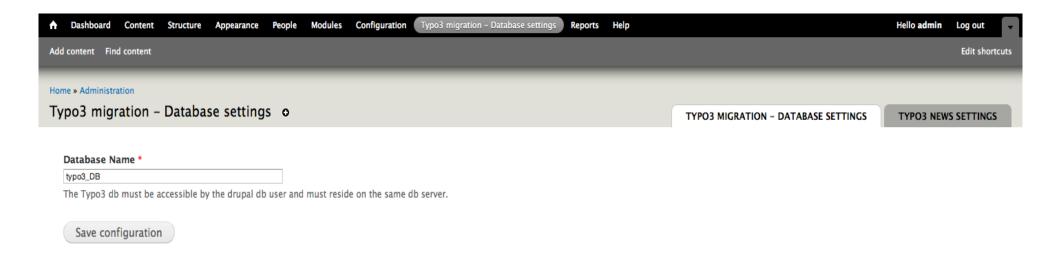
# Using the TYPO3\_migrate and migrate modules

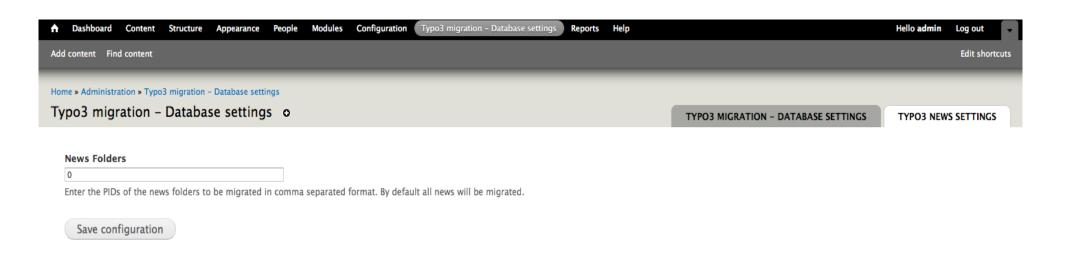
DEVELOPMENT					
ENABLED	NAME	VERSION	DESCRIPTION	OPERATIONS	
$\checkmark$	Migrate	7.x-2.1	Import content from external sources  Required by: Migrate Example (disabled), migrate_example_baseball (disabled), Migrate UI (enabled), Typo3 Migrate (enabled), Typo3 News Migrate (enabled), Typo3 Pages Migrate (enabled), Typo3 Users Migrate (enabled)		
	Migrate Example	7.x-2.1	Example migration data.  Requires: Taxonomy (enabled), Options (enabled), Field (enabled), Field SQL storage (enabled), Image (enabled), File (enabled), Comment (enabled), Text (enabled), Migrate (enabled), List (enabled), Number (enabled)		
Migrate UI 7.x-2.1  WI for managing migration processes Requires: Migrate (enabled)		Permissions			

ENABLED	NAME	VERSION	DESCRIPTION	OPERATIONS
$\checkmark$	Typo3 Migrate		Typo3 to drupal migration.  Requires: Migrate (enabled)  Required by: Typo3 News Migrate (enabled), Typo3 Pages Migrate (enabled), Typo3 Users Migrate (enabled)	Permissions
<b>Ø</b>	Typo3 News Migrate		Typo3 news to drupal migration.  Requires: Taxonomy (enabled), Options (enabled), Field (enabled), Field SQL storage (enabled), Image (enabled), File (enabled), Comment (enabled), Text (enabled), Migrate (enabled), Typo3 Migrate (enabled)	
<b>☑</b>	Typo3 Pages Migrate		Typo3 pages to drupal migration.  Requires: Taxonomy (enabled), Options (enabled), Field (enabled), Field SQL storage (enabled), Image (enabled), File (enabled), Comment (enabled), Text (enabled), Migrate (enabled), Typo3 Migrate (enabled)	
<b>▼</b>	Migrate (enabled), Typo3 Migrate (enabled)  Typo3 Users  Typo3 Users			



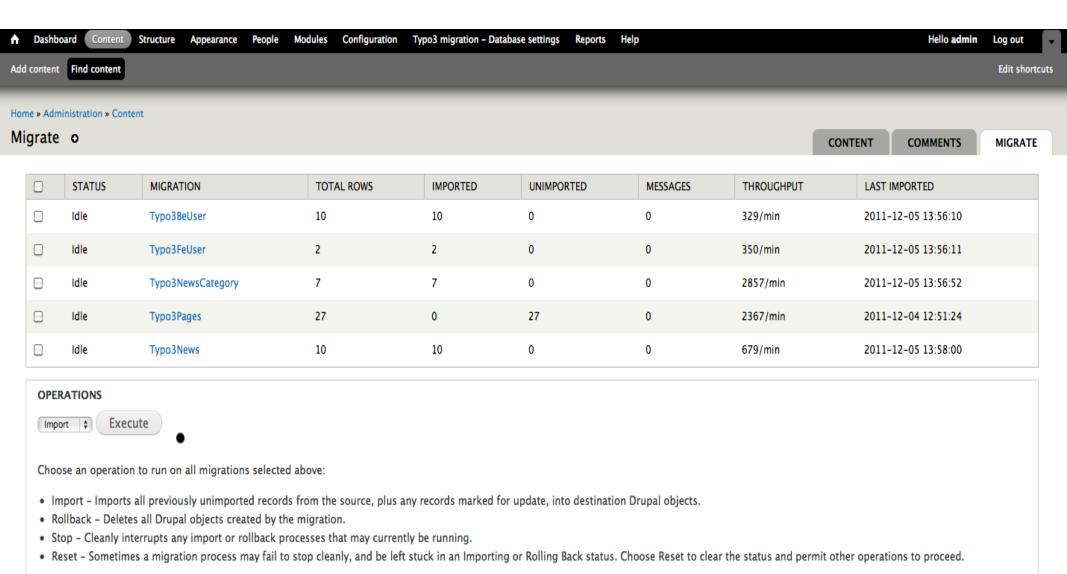
## Configure







## Migrate Dashboard





## If you prefer the command line

drush migrate-status

Dev-Mac:typo7 srijan\$ drush migrate-status

2.		_			
Name	Total	Imported	Unimported	Status	Last imported
Typo3BeUser	10	10	0	Idle	2011-12-07 16:16:58
Typo3FeUser	2	Ø	2	Idle	2011-12-05 20:08:22
Typo3NewsCategory	7	7	0	Idle	2011-12-07 16:19:51
Typo3Pages	27	Ø	27	Idle	2011-12-04 12:51:24
Typo3News	10	0	10	Idle	2011-12-07 05:40:13



### If you prefer the command line...

```
Dev-Mac:typo7 srijan$ drush --filter=migrate
All commands in migrate: (migrate)
migrate-descriptions View descriptions for a migration and all its mappings.
 (md)
migrate-fields-desti List the fields available for mapping in a destination.
 nation (mfd)
 migrate-fields-sourc List the fields available for mapping from a source.
 e (mfs)
migrate-import (mi)
                       Perform one or more migration processes
 migrate-reset-status
                       Reset a active migration's status to idle
 (mrs)
 migrate-rollback
                       Roll back the destination objects from a given migration
 (mr)
migrate-status (ms)
                       List all migrations with current status.
migrate-stop (mst)
                       Stop an active migration operation
migrate-wipe (mw)
                       Delete all nodes from specified content types.
```



Dev-Mac:typo7 srijan\$ drush migrate-import --help Perform a given migration Examples: migrate-import Article Import new articles migrate-import Article --update Import new items, and also update previously-imported items Import two specific articles. The ids refer to the value of the primary key in base migrate-import Article --idlist=4,9 table migrate-import Article --limit="60 Import for up to 60 seconds after stopping and rolling back the Article migration. seconds" --stop --rollback miarate-import User --feedback="1000 Display a progress message every 1000 processed items or less items" migrate-import --all=User Perform User migrations and all that follow it. Arguments: migration Name of migration(s) to import. Delimit multiple using commas. Options: --limit Limit on the length of each migration process, expressed in seconds or number of items Frequency of progress messages, in seconds or items processed --feedback A comma delimited list of ids to import or rollback. If unspecified, migrate imports --idlist all pending items or rolls back all items for the content set. Process all migrations that come after the specified migration. If no value is --all supplied, all migrations are processed. Capture performance information (timer, memory, or all) --instrument Force an operation to run, even if all dependencies are not satisfied --force In addition to processing unimported items from the source, update --update previously-imported items with new data --needs-update Reimport up to 10K records where needs\_update=1. This option is only needed when your Drupal DB is on a different DB server from your source data. Otherwise, these records get migrated with just migrate-import.

Stop specified migration(s) if applicable.

Rollback specified migration(s) if applicable.

Override file function to use when migrating images.

Aliases: mi

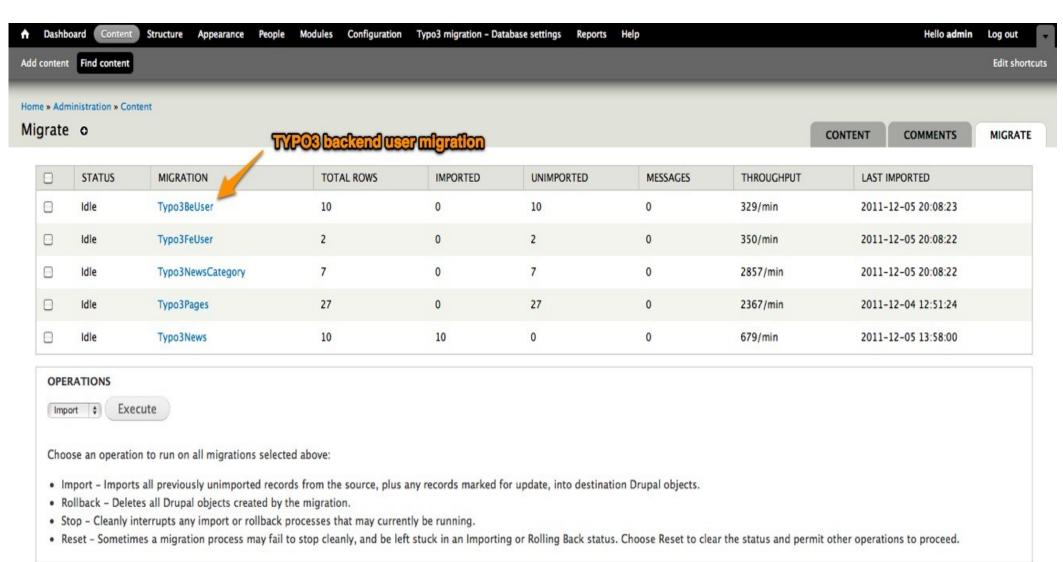
--stop

--rollback

--file\_function

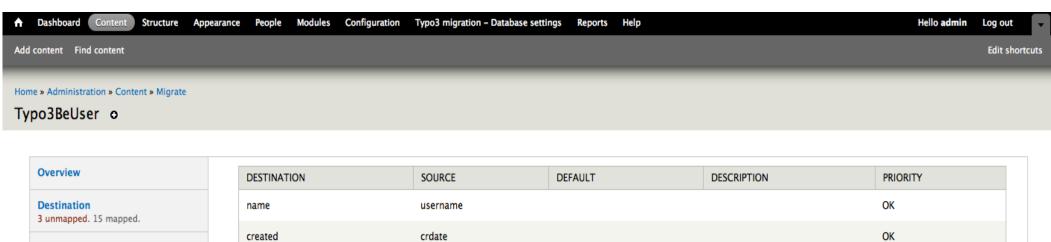


### Migrating users





## Users Mapping



DESTINATION	SOURCE	DEFAULT	DESCRIPTION
name	username		<u>'</u>
created	crdate		
mail	email	test@test.in	
pass	password	1234	
roles		2	
status	disable		
signature		be	
	created mail pass roles status	name username  created crdate  mail email  pass password  roles  status disable	name username  created crdate  mail email test@test.in  pass password 1234  roles 2  status disable



OK

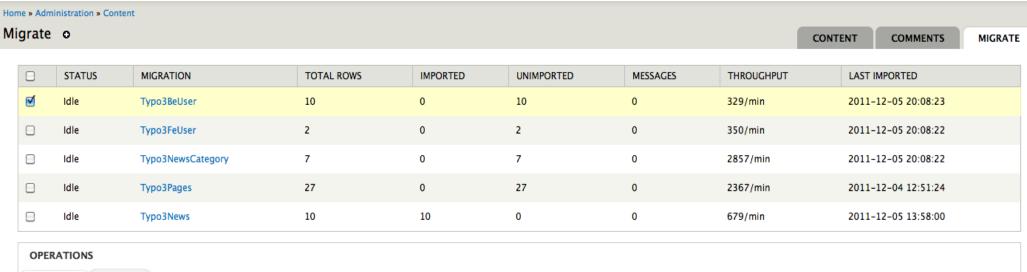
OK

OK

OK

OK

### Running the migration





Reset peration to run on all migrations selected above:

- . Import Imports all previously unimported records from the source, plus any records marked for update, into destination Drupal objects.
- · Rollback Deletes all Drupal objects created by the migration.
- . Stop Cleanly interrupts any import or rollback processes that may currently be running.
- Reset Sometimes a migration process may fail to stop cleanly, and be left stuck in an Importing or Rolling Back status. Choose Reset to clear the status and permit other operations to proceed.



### Running the migration ...

```
Dev-Mac:typo7 srijan$ drush migrate-import Typo3BeUser
Processed 10 (10 created, 0 updated, 0 failed, 0 ignored) in 2.1 sec (284/min) - done with 'Typo3BeUser'
```

Dev-Mac:typo7 srijan\$ drush migrate-rollback Typo3BeUser Rolled back 10 in 0.2 sec (3466/min) – done with 'Typo3BeUser'





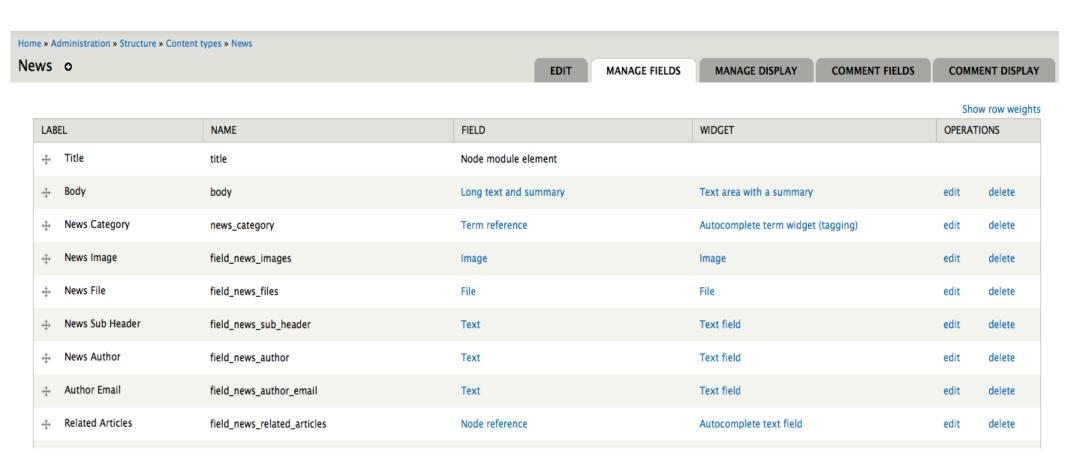


USERNAME	STATUS	ROLES	MEMBER FOR ▼	LAST ACCESS	OPERATIONS
benjamin	active		1 day 17 hours	never	edit
boxer	active		1 day 17 hours	never	edit
mrjones	active		1 day 17 hours	never	edit
snowball	active		1 day 17 hours	never	edit
napoleon	active		1 day 17 hours	never	edit
oldmajor	active		1 day 17 hours	never	edit
typo3_admin	active		2 days 17 hours	never	edit
admin	active	• administrator	1 month 5 days	7 sec ago	edit
news_editor	active		2 years 2 weeks	never	edit
advanced_editor	active		2 years 2 weeks	never	edit
simple_editor	active		2 years 2 weeks	never	edit



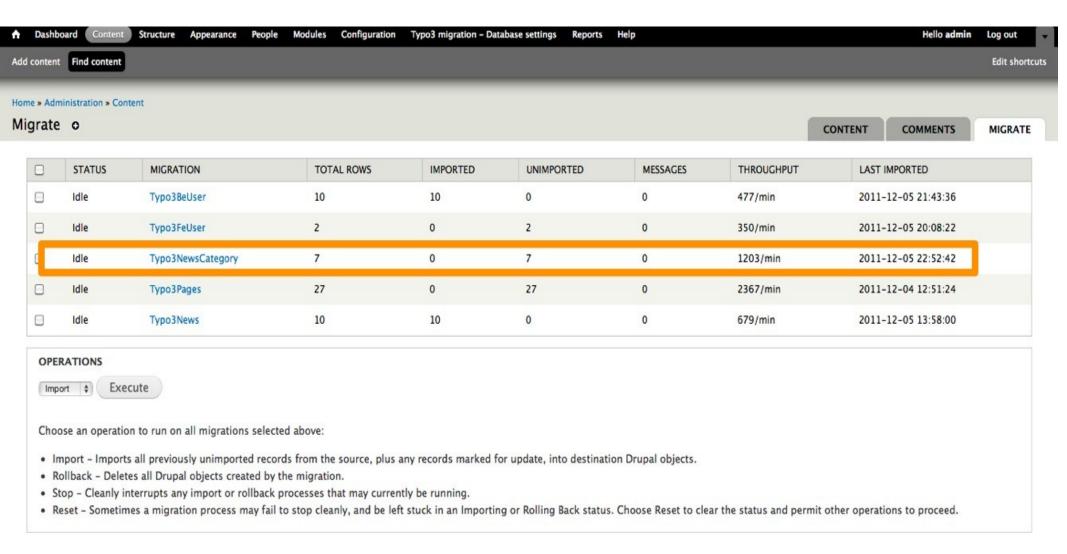
### Migrating tt\_news content - typo3\_news module

- Taxonomy News Category
- Content type News



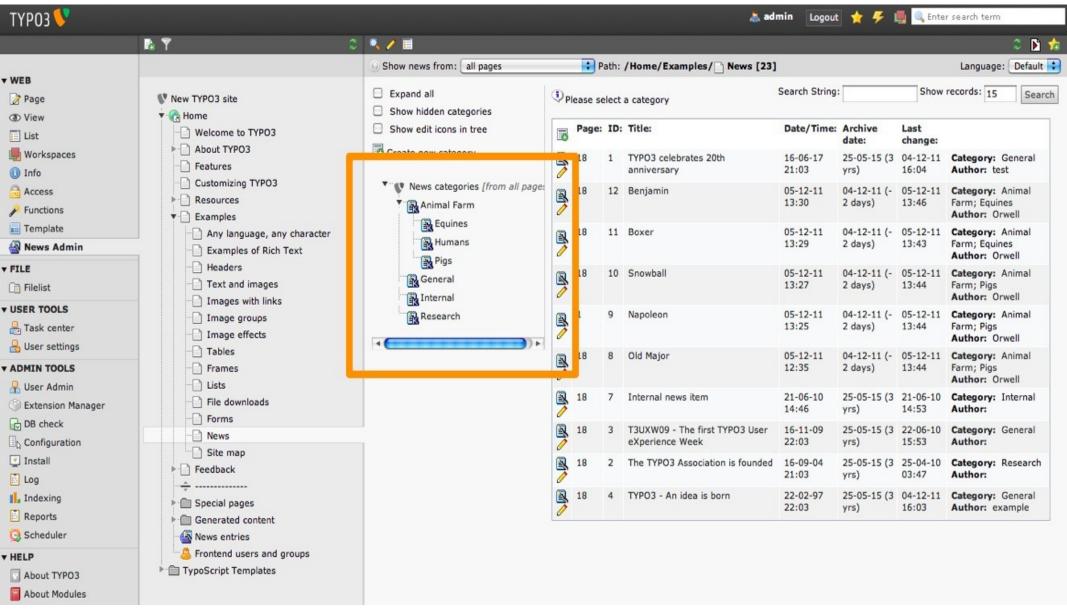


### News categories



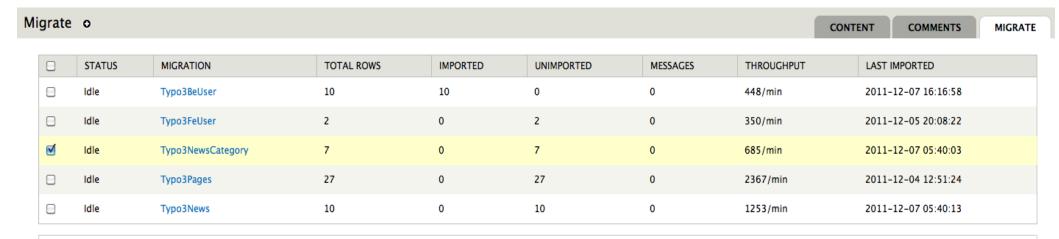


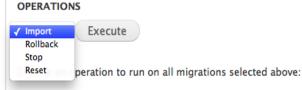






### Running the migration





- . Import Imports all previously unimported records from the source, plus any records marked for update, into destination Drupal objects.
- · Rollback Deletes all Drupal objects created by the migration.
- Stop Cleanly interrupts any import or rollback processes that may currently be running.
- Reset Sometimes a migration process may fail to stop cleanly, and be left stuck in an Importing or Rolling Back status. Choose Reset to clear the status and permit other operations to proceed.

Dev-Mac:typo7 srijan\$ drush mi Typo3NewsCategory
Processed 7 (7 created, 0 updated, 0 failed, 0 ignored) in 0.2 sec (2505/min) - done with 'Typo3NewsCategory'



### Migrated Categories



You can reorganize the terms in News Category using their drag-and-drop handles, and group terms under a parent term by sliding them under and to the right of the parent.

#### + Add term

NAME **OPERATIONS** 4 Animal Farm edit Equines edit Humans edit → Pigs edit General edit + Internal edit Research edit

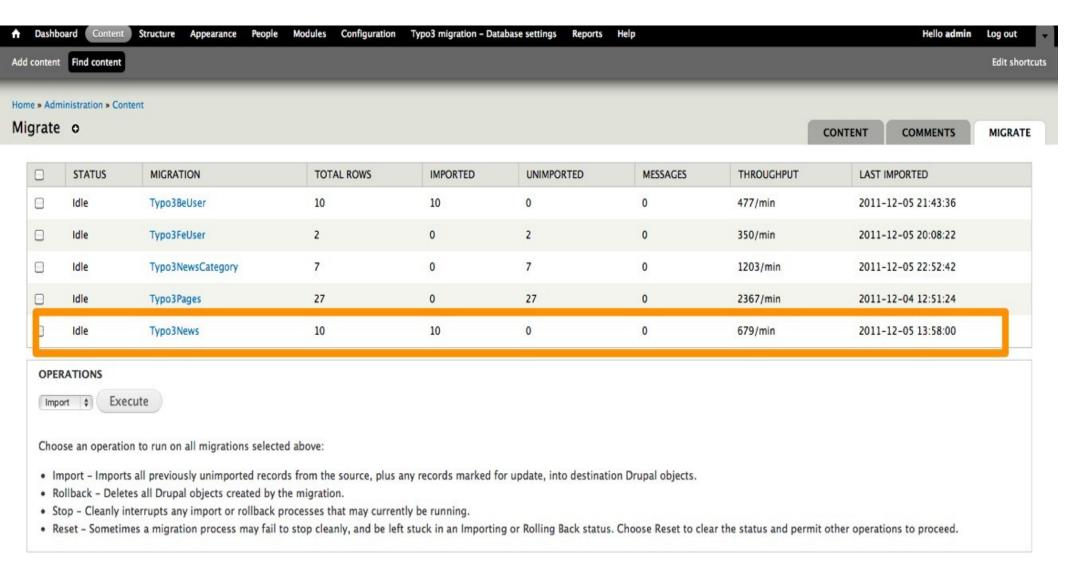
Save

Reset to alphabetical



Show row weights

### News articles





## News Mapping





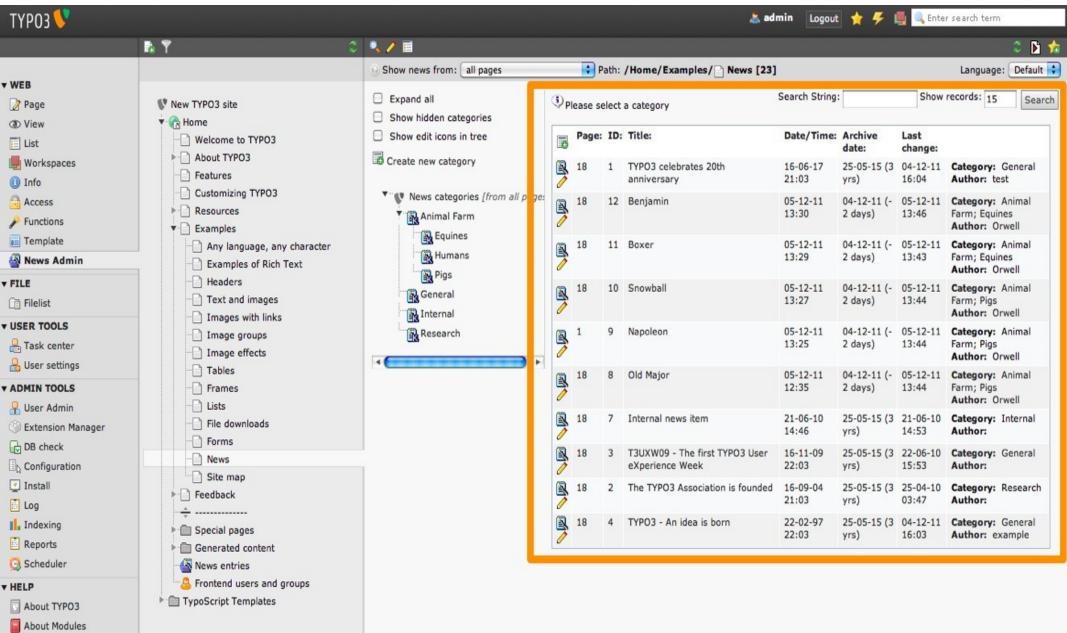
News Category used as destination field in mapping but not in list of destination fields

Overview		
Destination		
7 unmapped.	15 mapped.	
Source		
8 unmapped.	12 mapped.	
Mapping: D	one	
By priority: 12	2 OK.	
Mapping: D	NM	
By priority: 3	OK.	

DESTINATION	SOURCE	DEFAULT	DESCRIPTION	PRIORITY
title	title		title => title	ОК
field_news_sub_header	short		short => field_news_sub_header	ОК
field_news_author	author			ОК
field_news_author_email	author_email			ОК
field_news_images	image			ОК
field_news_files	news_files			ОК
News Category	newstags			ОК
field_news_related_articles	related_list			ОК
uid	uid	1		ОК
body	bodytext			ОК
created	crdate			ОК
changed	tstamp			ОК

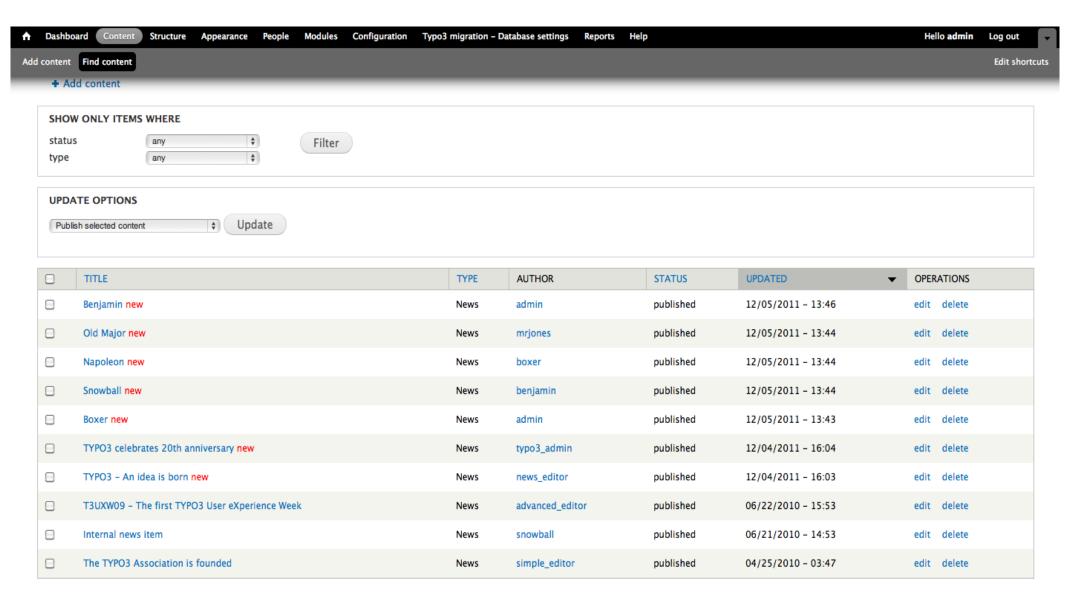








#### drush migrate-import Typo3News





Add content Find content Edit shortcuts

<u>a</u> Be

Navigation

Add content

#### Benjamin

Edit

View

published by admin on Mon, 12/05/2011 - 13:30

#### **News Image:**



#### Benjamin is a character in

George Orwell's novella

Animal Farm. He is the oldest of the animals and is alive in the last scene of the novel. He is less straightforward than most characters in the novel and a number of interpretations have been put forward.

It has been suggested that he represents the aged population of

Russia, or that he represents the

Menshevik intelligentsia: as intelligent, if not more so, than the novel's pigs. He is very cynical about the Revolution and life in general. For the most part he represents the skeptical people who believed that

Communism would not help the people of Russia, but who did not criticize it fervently enough to lose their lives. He is also quite significant in that he is not quite a horse (the working peasantry) and yet definitely not a leader like the pigs, although his intellect is equal to theirs. The fact that he also has a Biblical name could also imply that he also represents the

Jewish populace of Russia whose lives were not remotely improved under

Stalin's leadership. In fact, when asked if he was happier post-Revolution than before the Revolution, he simply remarks, "Donkeys live a long time. None of you has ever seen a dead donkey."

He is one of the wisest animals on the farm, and is able to "read as well as any pig".

[1] However, this is an ability he does not exercise until the end of the book, when Boxer is sent off to the slaughterhouse, and on one other occasion when Clover asks him to read the public display of the Seven



Add content Find content

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[1] However, this is an ability he does not exercise until the end of the book, when Boxer is sent off to the slaughterhouse, and on one other occasion when Clover asks him to read the public display of the Seven Commandments, as they seem to have changed (because of years of revisions by the pigs); Benjamin reveals that the Commandments now consist entirely of the message "All animals are equal, but some animals are more equal than others". Despite his age, he is never given the option of retirement. The pigs' betrayal of Boxer makes him more cynical than ever.

Seen from a wider perspective, Benjamin is a symbol of intelligence that during the times of revolution and its aftermath is very much aware about what is going on, but does nothing about it. The general (manipulated) masses are represented by the sheep, who are not aware about their misuse, but it is Benjamin who can see how the basic rules of their society are changing and does not involve himself in any way that would threaten his security. He is also one of the most commonsensical characters, understanding that the pigs are altering the Seven Commandments, and that Boxer was killed instead of peacefully dying at a hospital.

In the

1954 film, it is Benjamin who leads the other animals in a counter-revolution against Napoleon when his treatment of them finally goes too far, although the

1999 film simply features him fleeing the farm with some of the other animals when their treatment under Napoleon's sime becomes too bomb to endure any longer.

News Category:

Animal Farm Equines

News Author:

Orwell

Related Articles:

Boxer



**Edit shortcuts** 

## Incremental Migration

- Highwater mark field.
- Schedule(via cron) regular updates.



Steps for defining migration

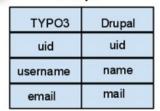


#### Fetch source data



ι	uid	username	email	disable
	7	snowball	snowball@example.com	0
	5	oldmajor	major@example.com	0















uid	name	mail	status
3	snowball	snowball@example.com	1
4	oldmajor	major@example.com	1

Lets have a look at the code



### Step 1: implement hook

Implement hook\_migrate\_api

Define your own module and let the migrate module know about it.

```
function mymodule_migrate_api() {
   return array(
   'api' => 2,
```



### Step 2: define migration class

- Description
- Let migrate know about the source of your content
- Let migrate know about the destination type
- Map the source and destination fields
- Massage the data



## Step 2(contd)

```
class Typo3NewsMigration extends Migration {
   public function __construct() {
     parent::__construct();
     ...
   }
   public function prepare(stdClass $node, stdClass $row) {
     ...
   }
}
```



### Functions

- public function \_\_construct() {..}
  - Define the destination type(node, user, comment etc)
  - Describe the source(databse, xml etc.)
  - Field mappings
- (optional) *public function prepare(stdClass \$node, stdClass \$row) {...}* 
  - Massage the data that was pulled in clean up text, links etc.



### Step 2a: Give Description

- Class description
  - \$\text{this->description} = t('News migration from TYPO3');
- Dependencies
  - \$this->dependencies = array('Typo3NewsCategory');

. . .



### Step 2b: Setup source query

```
$query = db_select(TYPO3_DATABASE_NAME . '.tt_news', 'tn')
         ->fields('tn', array('uid', 'crdate', 'tstamp', 'pid', 'title', 'hidden', 'short',
                'bodytext', 'author', 'author_email', 'image', 'imagecaption', 'links',
   'ext_url', 'news_files'))
         ->fields('catmm', array('sorting', 'uid_foreign'));
  $query->condition('tn.deleted', '0');
  $query->leftJoin( TYPO3_DATABASE_NAME . '.tt_news_cat_mm', 'catmm',
   'catmm.uid_local = tn.uid');
  $query->leftJoin( TYPO3_DATABASE_NAME . '.tt_news_cat', 'newscat',
   'newscat.uid = catmm.uid_foreign');
  // Related news articles
  $query->leftJoin(TYPO3_DATABASE_NAME . '.tt_news_related_mm', 'relatedmm',
   'relatedmm.uid_local = tn.uid');
  $query->orderBy('tn.tstamp', 'ASC');
  $query->groupBy('tn.uid');
  $query->addExpression('GROUP_CONCAT(newscat.title)', 'newstags');
  $this->source = new MigrateSourceSQL($query);
```

NOTE: \$query = Database::getConnection('for\_typo3\_migration', 'default'); \$\bigce{\bigce}\bigce{\big

Add content Find content

**Edit shortcuts** 

#### Overview Destination

7 unmapped. 15 mapped.

#### Source

8 unmapped. 12 mapped.

#### Mapping: Done By priority: 12 OK.

Mapping: DNM By priority: 3 OK. These are the fields available from the source of this migration. The machine names listed here are those available to be used as the second parameter to \$this>addFieldMapping() in your Migration class constructor. Unmapped fields are red.

#### Query

SELECT tn.uid AS uid, tn.crdate AS crdate, tn.tstamp AS tstamp, tn.pid AS pid, tn.title AS title, tn.hidden AS hidden, tn.short AS short, tn.bodytext AS bodytext, tn.author AS author, tn.author\_email AS author\_email, tn.image AS image, tn.imagecaption AS imagecaption, tn.links AS links, tn.ext\_url AS ext\_url, tn.news\_files AS news\_files, catmm.sorting AS sorting, catmm.uid\_foreign AS uid\_foreign, GROUP\_CONCAT(newscat.title) AS newstags, GROUP\_CONCAT(catmm.uid\_foreign) AS cat\_list, GROUP\_CONCAT(distinct relatedmm.uid\_foreign) AS related\_list

FROM

{typo3.tt\_news} tn

LEFT OUTER JOIN {typo3.tt\_news\_cat\_mm} catmm ON catmm.uid\_local = tn.uid

LEFT OUTER JOIN {typo3.tt\_news\_cat} newscat ON newscat.uid = catmm.uid\_foreign

LEFT OUTER JOIN {typo3.tt\_news\_related\_mm} relatedmm ON relatedmm.uid\_local = tn.uid

WHERE (tn.deleted = :db\_condition\_placeholder\_0)

GROUP BY tn.uid

ORDER BY tn.tstamp ASC

MACHINE NAME	DESCRIPTION
uid (PK)	tn.uid
crdate	tn.crdate
tstamp	tn.tstamp
pid	tn.pid
title	tn.title
hidden	tn.hidden
short	tn.short
bodytext	tn.bodytext
author	tn.author
author_email	tn.author_email
image	tn Imaga



### Step 2c: Map the Data

- Let the migrate module know the type of source
  - \$\forall \text{this->source} = new MigrateSourceSQL(\text{\$\text{query}\$});
- Similarly provide the destination handler
  - \$this->destination = new MigrateDestinationNode('news');



### Step 2d: Map the fields

- Field mappings take the form:
  - \$this->addFieldMapping('destination\_field\_name', 'source\_field\_name');
- Can define default values
  - \$this->addFieldMapping('language')
    ->defaultValue('en');



Help

Add content Find content

Home » Administration » Content » Migrate

#### Typo3News o



News Category used as destination field in mapping but not in list of destination fields

Overview	
Destination	
7 unmapped. 15 mapped.	
Source	
8 unmapped. 12 mapped.	
Manning Dane	
Mapping: Done By priority: 12 OK.	
by priority. 12 Ok.	
Mapping: DNM	
By priority: 3 OK.	

DESTINATION	SOURCE	DEFAULT	DESCRIPTION	PRIORITY
title	title		title => title	ОК
field_news_sub_header	short		short => field_news_sub_header	ОК
field_news_author	author			ОК
field_news_author_email	author_email			ОК
field_news_images	image			ОК
field_news_files	news_files			ОК
News Category	newstags			ОК
field_news_related_articles	related_list			ОК
uid	uid	1		ОК
body	bodytext			ОК
created	crdate			ОК
changed	tstamp			ОК



### Step 3:Massage the data

On its way to Drupal!

```
public function prepare(stdClass $node, stdClass $row){
    $node->status = ($row->hidden) ? '0' : '1';
    $node->body = $this->processLinkTag($node->body);
}
```



# Migrate Example

STATUS	MIGRATION	TOTAL ROWS	IMPORTED	UNIMPORTED	MESSAGES	THROUGHPUT	LAST IMPORTED
Idle	BeerTerm	3	0	3	0	2903/min	2011-11-01 15:27:37
Idle	BeerUser	4	0	4	0	300/min	2011-11-01 15:27:11
Idle	Typo3BeUser	10	10	0	0	448/min	2011-12-07 16:16:58
Idle	Typo3FeUser	2	0	2	0	350/min	2011-12-05 20:08:22
Idle	Typo3NewsCategory	7	7	0	0	2500/min	2011-12-07 16:19:51
Idle	Typo3Pages	27	0	27	0	2367/min	2011-12-04 12:51:24
Idle	BeerNode	3	0	3	0	1714/min	2011-11-01 15:52:16
Idle	Typo3News	10	0	10	0	1253/min	2011-12-07 05:40:13
Idle	BeerComment	5	0	5	0	Unknown	
Idle	WinePrep	N/A	N/A	N/A	N/A	Unknown	
Idle	WineRegion	12	0	12	0	Unknown	
Idle	WineVariety	8	0	8	0	Unknown	
Idle	WineBestWith	3	0	3	0	Unknown	
Idle	WineFile	1	0	1	0	Unknown	
Idle	WineRole	2	0	2	0	Unknown	
Idle	WineUser	3	0	3	0	Unknown	
Idle	WineProducer	2	0	2	0	Unknown	
Idle	WineProducerMultiXML	2	0	2	0	Unknown	
Idle	WineProducerXML	1	0	1	0	Unknown	
Idle	WineWine	2	0	2	0	Unknown	
Idle	WineComment	5	0	5	0	Unknown	
Idle	WineFinish	N/A	N/A	N/A	N/A	Unknown	



### Resources

Download and install the modules

- http://drupal.org/project/migrate
- http://drupal.org/project/TYPO3\_migrate

