

Data Migration

Digital Workplace / Intranet tips for a successful migration.

Be pragmatic

- Is it worth automating ?
- Value of the content greater than the cost of migrating?
- Cut and paste faster than writing the code?
- Could you hold a flat html version and add to search index
- See what you can delete before you start, you will be surprised how much!

Migration Process - Steps

1. Learn from history
2. Top level Inventory
3. Analysis existing technical delivery
4. Organise / ROT / Normalise
5. Test creation
6. Scripting
7. Mapping
8. Pilot
9. Test Run
10. Scheduled cutover
11. Notes

Learn from History

- Migration workshops to gain domain knowledge and historical reference
- Analyse previous migration learnings
- Interview (if possible) previous migration technical leads
- Review previous migration scripts (if possible)

Top level inventory

- Content types, Widgets, Navigation, Display Styles
- 3rd party content services e.g. video delivery or rss
- URIs, Taxonomy
- Content workflows
- Governance / Legal / Security Issues
- Translation requirements
- Accessibility requirements
- Versioning requirements
- Users specific requirements
- Content usage profiles / Review analytics if in place
- Device specific requirements e.g. scanner integration or phone optimised

Learn from History

- Review existing technology stack
- Interview (if possible) existing technical and development team
- Analyse schemas and structures
- Focused analysis on relationships and key's between data
- Validate delivery methods
 - Check for hacks that present data different than its stored

Organise / ROT / Normalise

- Identify
 - Redundant
 - Outdated
 - Trivial
- Develop additional classifications directly to support migration
- Validate if possible to add additional data in situ to support migration
- Normalise any data in situ where possible/practical

Test Creation

- Identify organisational users who can support testing efforts
- Identify testable elements of the migration
- Select test data
- Write and categorise test cases
- Identify all manual Versus automated testing elements
- Identify domain / knowledge experts within organisation to review test plans, cases and data

Mapping

- Document mappings from old to new
- Review mappings with Domain / Knowledge experts
- Develop Mapping schema
- Annotate where possible (e.g. with metadata) content in situ to ease automated testing

Write Migration scripts

- Develop migration scripts against mappings schema
- Develop schedule migration process e.g. multi step migrations
- Make sure you have unit tests for yours scripts
- Make sure you have worst case samples to test against

Migration - Pilot

- Create test bed
- Import & review agreed test data to validate testing harnesses / process
- Import and review randomised selection of content to validate dependency analysis
- Run full migration test to ascertain stress, load and performance issues
- Fix whatever is not working and rerun

Migration - Test Run

- Simulate live cut over
 - Validate everything
 - Run fail back tests
 - Give go / no-go

Scheduled Cutover

- Initiate content freeze (if required/possible)
- Complete migration
- Run tests
- Get acceptance from internal team
- Unfreeze (if freeze in place)
- Ensure sufficient end user support is available

Notes from the dark side

- Watch out for:
 - Recursive elements
 - Character sets
 - UI Fixes to data problems
 - Stripping in existing system of code
 - Relationships between data only visible on display
 - Syndication everyone has forgotten about
 - User privileges changing between systems
 - Media assets reused elsewhere
 - Navigation / Help that gives information content

SSO & Personalisation

- Approach to integration
- Limited by info held within system
- System will take profile information available to us via SSO and use what is available within that to personalise content
- Personalisation beyond this will be based on additional profile info and categorisation based in Drupal

Final word of warning

- Data that looks fine in one system will have holes exposed during and after the migration process.
- The experience of the new system will suffer if the data is not what the users expect.
- Users will be convinced the new system is broken if they can suddenly see problems in the data for the first time.
- Engage your users on this point
 - Make sure they understand the data is the same
 - Make sure they know what they can fix and how
 - Give the pointers to where the data can be fixed if it's coming from other systems
- Don't underestimate the potential impact on other systems if suddenly every runs back trying to get data updated.

Thanks for your time.

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