When Government Goes Digital with Drupal

Section 1: Introduction / Overview

Towards Open Government

In the current era of open government, any agency must focus on doing the public's business as transparently and as cost-effectively as possible. Whether an agency is working at the Federal, state, or local level, serving constituents and stakeholders is its first order of business.

Citizens, communities, and businesses need to:

■ Find relevant information about immediate topics of interest

■ Share insights about important issues

■ Communicate with agency staff members

Government activities depend on timely access to facts and analysis. The public wants immediate answers to their questions. Citizens, communities, and businesses expect to engage easily with public agencies over the web.

Exploiting the connectivity of the web, Drupal transforms how public agencies deliver information and services to constituents and stakeholders. As a platform for managing content and developing content-centric applications, Drupal ensures that agencies can deploy and manage cost-effective solutions.

How should agency decision-makers pursue goals for open government? What can leaders and planners do to best serve an agency's constituents and stakeholders? How can a public agency go digital and deliver compelling results at an affordable cost?

Here is a solution guide for managing government information with Drupal.

Section 2: How Acquia Delivers Effective Solutions:

What Acquia Delivers

Acquia enables government organizations to achieve their web site and communication objectives successfully with Drupal. Our industry-leading products and services ensure that government agencies around the globe can effectively deploy and operate Drupal-powered web solutions. As a GSA approved vendor, Acquia:

■ Develops and distributes expertly curated versions of Drupal for publishing and managing web content, rapidly assembling content-rich applications, and deploying collaborative communities

■ Provides Drupal-optimized cloud hosting for large-scale deployments that support high performance, mission-critical applications that comply with public sector security and accreditation standards

■ Delivers Drupal-specific development tools, self-service resources, and expert 24x7 support to accelerate development and simplify operation of Drupal applications that exceed agency SLA's

■ Offers expert consulting services to address the performance, security, technical architecture, migration and training needs of any government agency to ensure the successful development and deployment of Drupal-based solutions

Acquia helps public agencies worldwide take advantage of the open source Drupal platform to:

■ Create engaging web experiences

■ Connect constituents and stakeholders

■ Support collaboration between agencies and with citizens

■ Deliver mobile experiences

■ Distribute government information as online services

Let's consider how each of these solutions work.

Section 3: Vertical Specific Use Cases
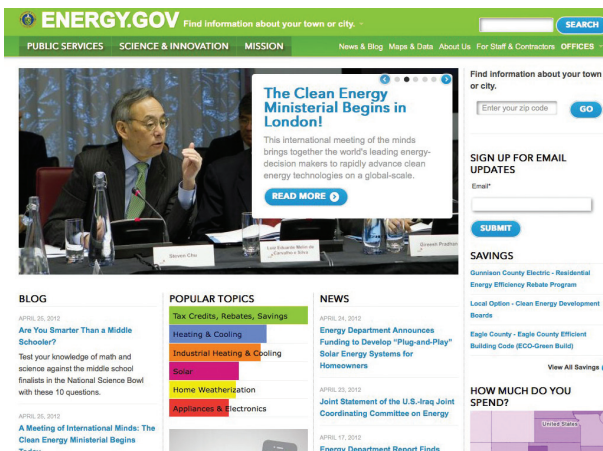## Section 3: Use Case 1

An Agency's Web Presence

Open government begins with an effective web presence, powered by an engaging web experience. Each agency produces multiple types of content — including program guides, fact sheets, evaluation reports, interactive data sets, and photo collections, to highlight just a few. Transparency demands ready access to public information delivered through an intuitive experience.

Of course better service has a price. In today's political climate, public agencies face tight budgets. Agency leaders must pay attention to reducing operating costs while increasing the overall productivity of staff members.
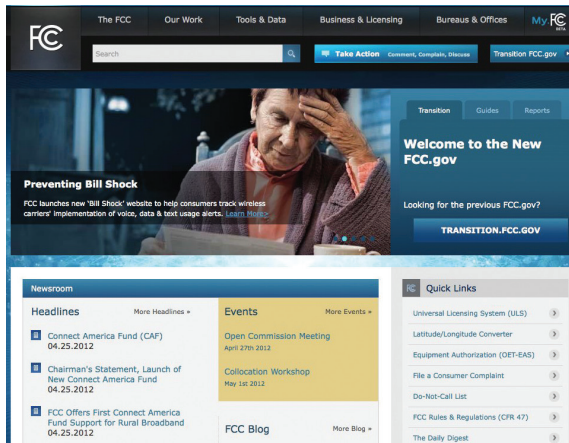
If the experience of the US Department of Energy (DoE) is a guide, an agency's web presence quickly evolves from a single web site and a set of static web pages, to multiple sites with separate management environments and high operating costs. But there is a practical solution. Using Drupal, DoE has been able to reduce its sprawling web presence by moving to a centralized online platform.

- Energy.gov is fast becoming the authoritative resource for all energy information across the Federal government. Leveraging the capabilities of open source technology, DoE is able to provide citizens, communities, and businesses with clear, consistent, and reliable information.

- DoE staff members use simple tools to maintain and manage the various sites on their own, without the expense of relying on IT experts for updates. Using Drupal, staff members can directly engage with key constituencies online.

The Federal Communications Commission (FCC) is having comparable success. It connects to the public at large over the web, relying on Drupal for key aspects of its web experience.

The agency staff can easily categorize content by multiple criteria to capture the public's varied perspectives. FCC.gov features:

■   A public affairs section about "our work"

■   A regulatory affairs section about "business and licensing"

■   Resources for application developers about "tools and data"

In addition to simplifying their publishing processes, agency leaders have the flexibility to cost-effectively manage the growing popularity of its web presence. The Acquia Managed Cloud service ensures this essential flexibility.

Thus the FCC and many other agencies rely on Acquia Managed Cloud to host their public web presence. They are no longer concerned about building and maintaining an underlying IT infrastructure. As a result, individual agencies only pay for the IT resources they consume. They easily can add bandwidth and other value-added cloud services, as needed, to accommodate growing popularity and to respond rapidly to new constituent demands.

Section 3: Use Case 2

Connecting with Constituents and Stakeholders

In this era of open government, an agency must establish direct communication channels with its constituents and stakeholders to build trust and ensure the seamless flow of information. Citizens, communities, and businesses must be able to voice their opinions and insights on multiple issues. Each agency must be able to easily collect and organize constituent responses, track public opinion on issues of particular concern, and cost-effectively reply to public inquiries.

There are many ways for government organizations to connect with the public over the web.

■   One channel is direct communications. Most members of the U.S. House of Representatives provide an electronic form on their sites for constituents to send messages. Unlike receiving comments at a general email address or processing hard-copy letters, members can directly manage incoming messages and replies. They can even list various 'hot topics' on a form, and then automatically route public comments to the appropriate staff members.

■   Drupal now powers many members' individual web sites, leveraging a unifying underlying content infrastructure maintained by the House's central IT group.

■   An agency can proactively connect with key constituent groups and provide them with targeted public information. Leveraging Drupal as an online platform, an agency can quickly deploy affiliate web sites on specialized topics.

■   Thus the DoE now relies on Drupal to produce an online resource on solar
    energy, targeting the issues and concerns of citizens in different regions
    across the country.

In short, when it comes to connecting with the public, Drupal wins the trifecta
for open government.

Whether they are in administrative agencies, Congress, state capitals, or
city halls, public servants can improve the quality of their connections with
constituents and stakeholders by relying on the right web-based solutions.
When they deliver seamless experiences with Drupal, agencies also reduce
administrative and operational costs. Finally, by relying on a hosted service
delivered in the cloud (such as the Acquia Managed Cloud), government
managers only need to pay for the IT resources they consume.

Section 3: Use Case 3

Supporting Collaboration

Often a government agency works with a range of constituents and
stakeholders, drawn from related organizations, as well as the public at large.
Agency leaders need to quickly assemble talent from multiple sources and
rapidly channel their activities to resolve issues or solve problems.

In today's fast-moving digital age, staff members and related parties need to
securely share information within and across organizational boundaries. They

must easily identify users by varied roles and foster collaboration based on diverse organizational responsibilities. It is essential to leverage the capabilities of a flexible platform for managing collaborative activities.
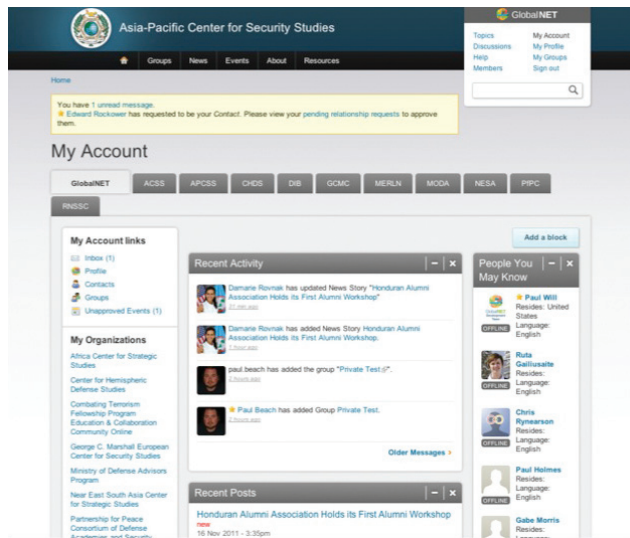
For example, the Defense Security Cooperation Agency (DSCA) within the Department of Defense relies on Drupal to deploy a collaborative social networking environment for international military affairs. Using Drupal Commons, a Drupal-powered social business environment delivered by Acquia, agency constituents are able to:

■   Easily find relevant and timely information

■   Discuss topics of shared interest

■   Support ad hoc relationships

■   Identify subject matter experts

With Drupal Commons, the DSCA site has the flexibility to manage varied roles for adding and accessing content, and for contributing to conversations.

It is also important to structure the flow of information to support agency and inter-agency teamwork. Drupal delivers many modes of collaboration and ad hoc information sharing.

■   Sites such as the DSCA include capabilities for threaded discussions where people post and share messages in an online forum. This helps team members exchange ideas and resolve issues.

■   A collaborative environment can provide support for frequently asked questions where subject matter experts curate the topics posed by the community and organize their replies. Drupal provides the tailored Q&A activities, and thus helps to assemble an online knowledge base.

■   The DSCA site includes contemporary social networking capabilities within a secure network environment. Participants link to, track, and follow colleagues, and stay abreast of common areas of interest. This helps build awareness about updates to agency-related topics across task teams.

Obviously, collaboration must be related to an agency's mission. As an agency, such as the DSCA, develops a collaborative work environment, it improves inter-organizational communications, simplifies how team members share information, and better serves its constituents and stakeholders.

Section 3: Use Case 4

Going Mobile

Open government must include plans for going mobile. With the explosion of smartphones and tablets, both staff members and the public at large increasingly expect to interact with public agencies using mobile devices. It is important for agencies to develop the useful mobile experiences that take into account where constituents are located and what stakeholders are trying to do.

Drupal provides a wide range of capabilities for supporting mobile experiences. As a development platform, Drupal makes it easy for developers to produce the state-of-the-art experiences that public agencies and their constituents expect.
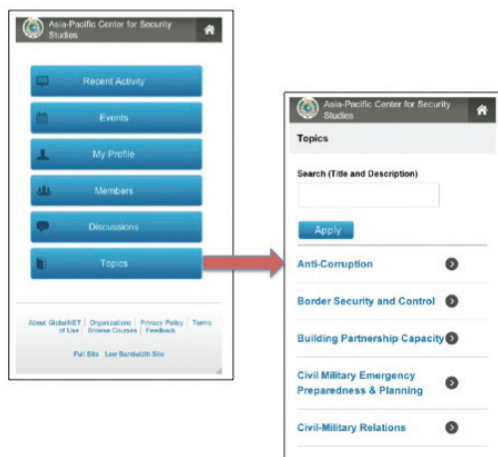
At a minimum, agency managers need to ensure that staff members, constituents, and the public at large can easily access the agency's online information resources from popular mobile devices. Screen sizes differ. Mobile users need to swipe and tap rather than point and click. Using responsive design and various approaches to deliver mobile experiences, agencies accommodate new modes of interactivity and deliver the same quality of service as provided with full screen web browsers.

■   Solar engineers working in the field or citizens concerned about disaster
    recovery should have a comparable experience when accessing Energy.gov
    or Recovery.gov from their mobile devices as when they are using an
    ordinary web browser.

■   With little extra effort, the New York State Senate supports mobile versions of
    its web experience on smartphones and Apple iPads to enhance constituent
    outreach.

Of course it is essential on a flexible content infrastructure. Drupal manages
content in ways that make it easy to assemble mobile experiences.

In some situations, it is important to enhance and simplify the mobile experience
by focusing on specific tasks. For instance, DSCA takes location and work
context into account.

- When on-the-go and relying on their smartphones, community members are attending meetings and doing program-related tasks.

- The mobile experience is designed for quick access to existing information, and not adding documents or creating new reports.

With Drupal, it is easy for developers to tailor mobile experiences to work tasks.

Of course, it is impossible to predict all the different applications for mobile devices. When going mobile, an agency needs to keep its options open, and exploit the capabilities of a flexible information environment delivered in the cloud.

Section 3: Use Case 5

Distributing Government Information as Online Services

Public agencies are in the business of producing information that is broadly consumed by other agencies and the public. The Federal government is taking the lead for distributing government information as online services. Federal agencies have a mandate to publish data sets and other APIs that third parties consume as remote services.

But there is more to producing the online services than simply publishing data sets and APIs on a web site. Online services also have to be managed in a cost-effective and systematic manner. Such agencies as the US Department of Education (ED) and the Federal Communications Commission (FCC) demonstrate how to manage the developer's experience leveraging Drupal as an open source content platform.

In addition to listing the key data sets and APIs at such sites as http://data.ed.gov/developers and http://www.fcc.gov/developers, ED and the FCC publish the essential technical information about data sets (delivered in multiple popular formats) and APIs. With this additional documentation and metadata descriptions, each agency ensures that its services can be easily adopted and consumed by target groups of constituents and stakeholders who seek to access specific public information as seamlessly as possible.

Distributing government information as online services does not require a large up-front investment. Each agency relies on hosting its online services in the

cloud and only pays for the IT resources it needs. This is where Acquia Managed Cloud delivers affordable and effective services. Such agencies as ED and the FCC substantially reinforce their relationships with key constituencies while reducing operating costs by simply by publishing data and APIs as services over the web.

In an era of open government, agencies continue to do what they are already doing — only better. In an era of tight budgets, agencies must reduce operating costs and become more effective. They must distribute digital information in innovative ways, using the open standards of the web. They must make their published content more useful to and more broadly adopted by key constituents, stakeholders and the public at large.

Section 4: Summary / Wrap Up

Optimizing the Delivery of Public Information

The promise of open government is fast becoming a reality. Using Drupal and relying on the capabilities of this open source platform, public agencies can go digital and deliver compelling results with predictable costs. Acquia, in turn, provides a wide range of enterprise-grade development, hosting, and support services to ensure successful Drupal deployments across public agencies.

- Acquia delivers curated Drupal distributions for assembling web experiences, publishing web content, and building collaborative platforms. Acquia ensures that with such distributions as Acquia Drupal, Drupal Commons, Open Publish, and Open Government, public agencies have the content-centric platforms they need to best serve their constituents and stakeholders.

- Acquia knows how to deploy Drupal for mission-critical enterprise applications. Acquia provides a hosting service, Acquia Managed Cloud, for running enterprise-scale Drupal sites and is capable of rapidly expanding infrastructure services to meet changing needs.

- Acquia provides a range of management, professional, and educational services to design and deploy Drupal sites, to make Drupal developers more effective, and to maintain Drupal powered web sites on an ongoing basis.

The end results are targeted enterprise solutions.

Using Drupal, public agencies are now able to optimize the delivery of public information to constituents and stakeholders at very affordable costs. By building on a flexible and extensible content infrastructure, they can stay abreast of rapid changes. In short, public agencies become more effective at delivering the information the public expects, wants, and needs, while spending less to do so.