Message from Danny Werfel, Controller, Office of Management and Budget to Agency Deputy Secretaries

SUBJECT: Implementing the Digital Government Strategy

///

As you know, on May 23, 2012, the President issued a directive entitled *Building a 21st Century Digital Government*.[1] This launched a comprehensive Digital Government Strategy[2] (Strategy) aimed at delivering better digital services to the American people. In order to "ensure that agencies make the best use of emerging technologies in serving the public," the President directed agencies to:

(1) implement the requirements of the Strategy within 12 months of the date of [the] memorandum and comply with the timeframes for specific actions specified therein; and
(2) within 90 days of the date of [the] memorandum, create a page on its website, located at www.[agency].gov/digitalstrategy, to publicly report progress in meeting the requirements of the Strategy in a machine-readable format.

The Strategy provides agencies with a 12-month roadmap that focuses on several priority areas cutting across traditional functional and programmatic lines. Successful implementation will require participation from multiple stakeholders within a given agency, including but not limited to Chief Information Officers (CIOs), Chief Financial Officers (CFOs), Chief Technology Officers (CTOs), Chief Acquisition Officers (CAOs), Chief Public Affairs Officers, Geographic Information Officers (GIOs), Open Government Directors, program leads, digital strategists, web managers, and data managers. Agency leadership must ensure that efforts are coordinated across these groups as needed.

To support the strategy implementation process, I wanted to reach out to you regarding next steps to implement the "Digital Government Strategy". Through this email, OMB is directing each agency to take the following steps:

- **Designate Lead for Initiative.** Each agency's COO shall designate an individual empowered to lead and coordinate the agency's technical implementation of the Strategy and report progress according to the guidance contained in this memo. The agency lead will receive all future guidance from OMB on implementing and reporting progress on specific strategy milestones and ensure dissemination to relevant stakeholders throughout the agency. Agencies should communicate the name of this lead to OMB on the MAX Community page within 10 days of today (August 2, 2012).

---

[1] http://www.whitehouse.gov/sites/default/files/uploads/2012digital_mem_rel.pdf
[2] http://www.whitehouse.gov/sites/default/files/omb/egov/digital-government/digital-government-strategy.pdf

- **Publicly Report Progress.** Agencies must set up their /digitalstrategy pages and publicly report progress according to the guidance in Attachments A-D. The agency lead shall be responsible for ensuring timely, accurate, and consistent reporting. Agencies must launch their /digitalstrategy pages by August 16, 2012 then update the pages and required reporting fields at least once a month, and/or as they complete required deliverables.

- **Customer-Facing Services**. No later than August 23, 2012, agencies shall, in consultation with relevant stakeholders and customers, identify at least: (a) two existing major customer-facing systems that contain high-value data or content as first-move candidates to make compliant with new open data, content, and web API policy; and (b) two existing priority customer-facing services to optimize for mobile use. The Federal CIO is providing detailed guidance for implementing these actions under separate cover to the forthcoming designated leads for this initiative, and in the interim through the CIO council.

To facilitate coordination on Strategy implementation, OMB has created a MAX Community page. Please visit the page for updates on milestone actions and guidance.

For any questions regarding this initiative, please contact Haley Van Dyck at egov@omb.eop.gov, with "Digital Government Strategy" as the subject line.

Attachments

Implementing the Digital Government Strategy—Technical Attachments

Attachment A

Consistent with the President's directive, each agency must create and maintain a /digitalstrategy page to publicly report progress in meeting the requirements of the Digital Government Strategy in a machine-readable format. The following provides detailed guidance on setting up these pages and generating the required reporting files.

- **Location.** The /digtalstrategy pages should be located at www.[agency].gov/digitalstrategy (e.g., www.hhs.gov/digitalstrategy, www.nsf.gov/digitalstrategy, etc.)

- **Required Information.** These /digitalstrategy pages will serve as the authoritative source of information on implementation of all required milestone actions assigned to the agency. At a minimum, agency /digitalstrategy pages must contain OMB-required progress reporting measures. This memo provides detailed guidance on progress reporting for government-wide actions required of all agencies (see Attachment B). Additional guidance will be provided for reporting progress on milestone actions assigned to specific agencies and groups (e.g. the Federal CIO Council).

- **Supplemental Information.** Agencies are encouraged to supplement required progress reporting with other information and tools (e.g. blog posts, customer engagement tools, as with /open pages). Components, bureaus, and programs are also encouraged to highlight their work implementing the Strategy through their own channels (e.g. www.cdc.gov/digitalstrategy). However, agency leadership must ensure all supplemental information is consistent with the authoritative reporting posted on the agency's main /digitalstrategy page.

- **Machine-Readable Format.** At a minimum, all OMB-required information (see Attachment C) must be available in the following machine-readable formats: XML, JSON and HTML. See Attachment D for required XML and JSON schemas. Agencies must post their initial XML, JSON, and HTML files at `/digitalstrategy.xml`, `/digitalstrategy.json`, and `/digitalstrategy` (or `/digitalstrategy.html` if not using a content management system) at the same time they launch their /digitalstrategy pages (August 16, 2012), and then update the files at least once a month, and/or as they complete required deliverables.

- **Generating Machine-Readable Reporting Files.** Agencies must follow the provided schema (see Attachment D). To help agencies generate these files, the Digital Services

Innovation Center, an incubator and accelerator for innovation in digital services for the Federal government, has built a shared file generator tool (available at https://github.com/GSA/digital-strategy-report-generator). Agencies can enter information in a form, then receive a zip file containing reports in JSON, XML, and HTML. Use of the tool is not mandatory.

- **HTML Presentation.** Agencies may use the generated HTML file to help meet the minimum requirement for their /digitalstrategy pages. Such HTML is designed to be easily pasted into existing HTML templates or a CMS, however, no specific HTML markup (generated or otherwise) is required so long as the necessary information is included clearly. Drawing on the principles of the Strategy, agencies are encouraged to decouple their official reporting information from its presentation on the /digitalstrategy page.

- **Additional Guidance.** Progress reporting at /digitalstrategy will be an iterative process. In many cases, agencies will not be able to report progress on implementation of milestone actions until further guidance is provided defining specific deliverables. Where specific deliverables for milestone actions are yet to be determined (e.g. required elements of governance structures for #4.2), additional guidance will be provided as needed. Where necessary, fields will be added to the schema as made available at https://github.com/GSA/digital-strategy.

Attachment B

The following table captures all government-wide actions required of all agencies in the Digital Government Strategy, including the time period in which the action must be completed, starting from the date the Digital Government Strategy was published. Additional guidance will be provided for reporting progress on milestone actions assigned to specific agencies and groups (e.g. the Federal CIO Council).

#	Agency Milestone Actions	Timeframe (months)		
		3	6	12
1.2	Ensure all new IT systems follow the open data, content, and web API policy and operationalize agency.gov/developer pages. *[Within 6 months of release of open data policy – see milestone 1.1]*			•
2.1	Engage with customers to identify at least two existing major customer-facing services that contain high-value data or content as first-move candidates to make compliant with new open data, content, and web API policy.	•		
2.2	Make high-value data and content in at least existing two major customer-facing systems available through web APIs, apply metadata tagging and publish a plan to transition additional high-value systems. *[Within 6 months of release of open data policy – see milestone 1.1]*			•
4.2	Establish an agency-wide governance structure for developing and delivering digital services. *[Within 3 months of release of governance guidance – see milestone 4.1]*		•	
5.2	Develop an enterprise-wide inventory of mobile devices and wireless service contracts.		•	
5.3	Evaluate the government-wide contract vehicles in the alternatives analysis for all new mobile-related procurements.			•
6.3	Ensure all new digital services follow digital services and customer experience improvement guidelines. *[Within 6 months of release of improvement guidance – see milestone 6.2]*			•
7.1	Engage with customers to identify at least two existing priority customer-facing services to optimize for mobile use.	•		
7.2	Optimize at least two existing priority customer-facing services for mobile use and publish a plan for improving additional existing services. *[Within 6 months of release of digital services improvement guidance – see milestone 6.2]*			•
8.2	Implement performance and customer satisfaction measuring tools on all .gov websites. *[Within 3 months of release of tools and guidance – see milestone 8.1]*		•	

Attachment C

The following table contains OMB-required reporting information for government-wide actions required of all agencies in the Digital Government Strategy. Progress reporting at /digitalstrategy will be an iterative process. In many cases, agencies will not be able to report progress on implementation of milestone actions until further guidance is provided defining specific deliverables. Where specific deliverables for milestone actions are yet to be determined (e.g. required elements of governance structures for #4.2), additional implementation guidance will be provided as needed. Where necessary, fields will be added to the schema.

Required Information for /digitalstrategy Pages
1.2.0 Overall status (Completed, In Progress, Not Started) **1.2.1** Paragraph on policy
2.1.0 Overall status (Completed, In Progress, Not Started) **2.1.1** Paragraph on customer engagement approach **2.1.2** Prioritized list of systems (datasets) (Name, Description, Scope, Customers, Unique Investment Identifier)
2.2.0 Overall status (Completed, In Progress, Not Started) **2.2.1** Report on systems (datasets) (Name, Description, Scope, Customers, API Link, Compliance Summary) **2.2.2** Link to plan on future activity
4.2.0 Overall status (Completed, In Progress, Not Started) **4.2.1** Link to governance document **4.2.2** List of goals, measures, and target completion dates **4.2.3** Checklist of agency-wide policies and standards established (Established, Under development, Not Started)
5.2.0 Overall status (Completed, In Progress, Not Started) **5.2.1** Link to inventory **5.2.2** Bureau inventory status by bureau (Completed, In Progress, Not Started)
5.3.0 Overall status (Completed, In Progress, Not Started) **5.3.1** Paragraph on policy
6.3.0 Overall status (Completed, In Progress, Not Started) **6.3.1** Paragraph on policy
7.1.0 Overall status (Completed, In Progress, Not Started) **7.1.1** Paragraph on customer engagement approach **7.1.2** Prioritized list of services (Name, Description, Scope, Customers, Unique Investment Identifier)
7.2.0 Overall status (Completed, In Progress, Not Started) **7.2.1** Report on services (Name, Description, Scope, Customers, Link, Optimization Summary **7.2.2** Link to plan on future activity
8.2.0 Overall status (Completed, In Progress, Not Started) **8.2.1** Paragraph on performance measurement tool implementation **8.2.2** Paragraph on customer satisfaction tool implementation

Attachment D

The repository hosted at https://github.com/GSA/digital-strategy serves as the canonical machine-readable schema for describing action items within the President's digital strategy, and for reporting on its progress. Citizen developers are encouraged to use this information to build applications and tools. As agencies place their `digitalstrategy.{format}` reporting file at the root level of their agency's primary domain, developers could use the agency list included to retrieve an individual agency's progress, or to aggregate agencies' progress as a whole.

API

The files contained in this repository are available as a pseudo-service using the following syntax:

```
https://raw.github.com/GSA/digital-strategy/{api_version}/{file}.{format}
```

Examples:

```
https://raw.github.com/GSA/digital-strategy/1/agencies.xml
https://raw.github.com/GSA/digital-strategy/1/items.json
```

Files

- `agencies.json` and `agencies.xml` - machine-readable listing of common federal agencies, their primary domain, and abbreviation (e.g., FBI)
- `items.json` and `items.xml` - machine-readable representation of the action items from the digital strategy

Reporting

To comply with the Presidential Memorandum's reporting requirements, each reporting agency should generate `digitalstrategy.xml` and `digitalstrategy.json` files which meet the schema described herein and should place such files at the top level of their primary domain e.g., `agency.gov/digitalstrategy.json` and `agency.gov/digitalstrategy.xml`. A human-readable version of the same information (not restricted to any specific format or schema) should also be placed at `agency.gov/digitalstrategy` or `agency.gov/digitalstrategy.html` for agencies with a content management system or similar publishing platform.

To create a report file, agencies could use the tool(s) provided by GSA, or could generate the files using their own means, so long as such generated files conform to the established schema. Agencies creating tools or applications to this end are encouraged to share their tools publicly and with other agencies.

Report files as substantially similar to the base schema file contained within this repository, however, when reporting, agencies should propagate their answers into the `value` field of each action item. Multiple values are to be represented as an array of values in JSON, and as a child `value` node in XML.

Agencies are encourages to make their reports as developer-friendly as possible, such as supporting the JSONP callback parameter, or allowing cross-domain JSON requests on your server

Data Types and Standards

In the interest of compatibility and interoperability, unless otherwise noted, no field or value should contain any tags or markup.

Agency List

The agency list contains a timestamp of when the file was last updated and the schema version as well as a listing of common federal agencies. Each agency has three fields:

- **name** - The Human-readable name of the agency (e.g., Federal Communications Commission)
- **id** - The agencies abbreviation or id (e.g., fcc)
- **url** - the agency's primary domain (e.g., www.fcc.gov)

In JSON this is represented as:

```
{
    "generated":"2012-07-12 10:46:19",
    "agencies":[
       {
          "name":"Administrative Conference of the United States (ACUS)",
          "id":"acus",
          "url":"www.acus.gov"
       },
       {
          "name":"Advisory Council on Historic Preservation (ACHP)",
          "id":"achp",
          "url":"www.achp.gov"
       },
       ...
    ]
}
```

In XML this is represented as:

```xml
<?xml version="1.0"?>
<agencies>
  <generated>2012-07-12 10:46:19</generated>
  <agencies>
    <agency id="acus">
      <name>Administrative Conference of the United States (ACUS)</name>
      <url>www.acus.gov</url>
    </agency>
    <agency id="achp">
      <name>Advisory Council on Historic Preservation (ACHP)</name>
      <url>www.achp.gov</url>
    </agency>
    ...
  </agencies>
</agencies>
```

Items

The items act as a machine-readable representation of the agency-specific action items outlined in the digital strategy, as well as a base schema for reporting on its progress. At the root level, the schema contains a timestamp indicating when it was last updated and the schema version, as well as a list of all action items.

Each action item can have the following properties:

- **id** - a unique identifier for that action item, e.g., 2.1
- **parent** - where applicable, the parent action item, (e.g., 2.2.1's parent would be 2.1). Useful for grouping and formatting
- **text** - the human-readable text of the action item
- **due** - when the action item is due (relative to the release of the digital strategy)
- **due_date** - date calculated as the absolute due date for the action item
- **fields** - a list of all fields associated with that action item
- **multiple** - whether multiple responses are allowed per action item (e.g., listing multiple systems with each of the action-item's field being answered once per system)

The field object is made up the following:

- **type** - the HTML input type that best represents the field (e.g., select, text, textarea)
- **name** - HTML friendly name for the field
- **label** - Human readable label for the field
- **option** - where applicable, an array of label, value pairs describing the potential options (e.g. for a drop down)
- **value** - when used as an agency progress report, the agency-reported answer to the field, or if multiple answers, an array of agency-reported answers. Multiple values will be represented as an array in JSON, as nested `value` nodes in XML.

In JSON this would be represented as:

```json
{
    "generated":"2012-07-12 11:00:27",
    "items":[
        {
            "id":"2.1",
            "parent":null,
            "text":"Engage with customers to identify at least two existing major
customer-facing services that contain high-value data or content as first-move
candidates to make compliant with new open data, content, and web API policy.",
            "due":"90 Days",
            "due_date":"2012\/08\/20",
            "fields":[
                {
                    "type":"select",
                    "name":"2-1-status",
                    "label":"Overall Status",
                    "options":[
                        {
                            "label":"Not Started",
                            "value":"not-started"
                        },
                        {
                            "label":"In Progress",
                            "value":"in-progress"
                        },
                        {
                            "label":"Completed",
                            "value":"completed"
                        }
                    ],
                    "value":null
                }
            ],
            "multiple":false
        },
        ...
    ],
}
```

In XML this would be represented as:

```xml
<?xml version="1.0"?>
<items>
  <generated>2012-07-12 11:00:27</generated>
  <items>
    <item id="2.1">
      <parent/>
      <text>Engage with customers to identify at least two existing major customer-
facing services that contain high-value data or content as first-move candidates to
make compliant with new open data, content, and web API policy.</text>
      <due>90 Days</due>
      <due_date>2012/08/20</due_date>
      <fields>
        <field>
          <type>select</type>
          <name>2-1-status</name>
          <label>Overall Status</label>
          <options>
            <option>
              <label>Not Started</label>
              <value>not-started</value>
            </option>
            <option>
              <label>In Progress</label>
              <value>in-progress</value>
            </option>
            <option>
              <label>Completed</label>
              <value>completed</value>
            </option>
          </options>
          <value/>
        </field>
      </fields>
      <multiple/>
    </item>
    ...
  </items>
</items>
```

Additional Resources

Please feel free to use the project wiki to share any additional resources related to the project including example usage (in PHP).