

WEB SERVICES AND TRIGGER PROGRAM GUIDELINES OCTOBER 21, 2013

Web services and file triggers have generated significant interest within Dancik's customer base and are already being widely used. The purpose of this document is to inform our customers, their employees, and their third-party contractors of the policies and guidelines for using, creating and supporting web services and triggers, especially regarding usage from outside of Dancik's products.

1. Definitions

- a. Dancik's web services are programs called using web-browser protocol, which execute Dancik programs specific to Dancik's products (i.e., DES, CMS, Décor 24, IWMS, Navigator, RADAR, and SSM).
- b. Dancik's web services have been built for specific purposes within the Dancik applications, but may be used by our customers for other purposes, such as:
 - i. Calling Dancik web services from a customer's own web site;
 - ii. Calling Dancik web services from a customer's own mobile or other applications.
- c. Dancik's web services are categorized based on what we often refer to as "wrappers" or authentication schemes:
 - i. Open web services (open to public with no security considerations);
 - ii. Authenticated web services (services that require authentication by your IBM server with a user ID and/or password);
 - iii. Session-based web services (services that require an initial sign on with a user ID and/or password, and use cookies for subsequent actions);
 - iv. fcB2B web services, which are part of Dancik's CMS, and follow signature standards developed by the Floor Covering B2B Association (<u>www.fcb2b.com</u>).
- d. Dancik's file trigger infrastructure (referred to as "triggers") are programs that are linked to the IBM DB2 database and called automatically based on adds, changes, or deletes to records in a DB2 file.
 - i. Unlike web services, which are approved and tested Dancik programs called by Dancik or non-Dancik web pages, the file triggers can call non-Dancik programs. Therefore, customer triggers have an inherent risk that falls completely outside of Dancik's maintenance plans and visibility.
 - ii. Dancik provides a mechanism within the DES system to attach trigger programs to specific files. Only Dancik-developed triggers are attached to this mechanism at this time. Not all Dancik-developed triggers will be visible in the DES trigger infrastructure features (which are provided as a means of attaching programs to trigger events).

- iii. The Dancik file trigger infrastructure manages the trigger programs so that multiple triggers on the same file are queued appropriately, thereby avoiding performance impacts due to excessive simultaneous trigger program executions.
- iv. Dancik File trigger programs should not be confused with IBM's trigger programs. In theory, Dancik's and IBM's triggers accomplish the same goals (attaching processes directly to database changes), but the Dancik trigger infrastructure is built to simplify and optimize trigger processes that relate to Dancik files.

2. <u>Web Service Policies</u>

- a. Web services are the basis of many Dancik products (including CMS, Décor 24, Navigator, RADAR, and SSM). Therefore, every day new services are added or updated. Some of the services will be useful to customers and can be called successfully from customer web sites and applications, while others may be too unique to internal Dancik processes for customer use. Some web service programs may not be useable by customers at all due to the type of "wrapper" on the web service or other architectural issues. In any event, more and more potentially useful web services will become available to Dancik customers.
- b. The web services, when used internally for/by our products (called from Dancik web pages), are maintained by Dancik and are covered by the respective Dancik service agreement for the specific Dancik product.
- c. The support of web services when called from <u>any web pages or applications</u> <u>outside of Dancik</u> (including consulting or programming services) are described within this document. Such support will be provided for exclusively through Professional Services agreements, except as noted herein.
- d. Dancik documents its web services as part of our ongoing development efforts. Web service documentation is designed to be used by IT staff or programmers that will be calling the web services from non-Dancik applications. The web services that are documented by Dancik are the ones that customers should try to utilize on their own. More web services will be updated, documented, and added to the list of documented services when Dancik elects to develop and document new services.
- e. Web services that have not yet been documented by Dancik can still be used by customers. However, if documentation of a currently undocumented web service is requested by a customer for immediate use, it will be considered a billable Professional Service.
- f. Some web services are designed to be authenticated, some not, and they differ based on the initial intent of each web service. Depending on the use case, the current Dancik "wrappers" of a web service may not be appropriate for a customer, and a new version of a web service (a new "wrapper") may be required. For example, if a web service that is written for IBM iSeries user verification is needed on a public web site, a new version will be needed. New versions of a web service, including changes of "wrapper", changes of security schemes, or changes in filters, logic, and so on will be considered a billable Professional Service. <u>Note</u>: when a new "wrapper" is required, the billing will only be for that wrapper itself, as the underlying web service will not need to be changed.

- g. Consulting on the use of web services, modifications to existing web services, and development of new web services will be considered Professional Services. See examples in the next sections for guidelines on what is or is not considered billable.
- h. Dancik customers that will be utilizing web services in their own projects are encouraged to gather and document their questions and requirements, and to engage Dancik's Professional Services group to assist in these billable activities. Dancik encourages customers to prepare storyboards, screen mock-ups, and detailed information about their projects, to minimize the time and cost for Dancik to assist in such projects.
- i. Our expectation is that many customers will utilize these services in special ways. Scheduling such projects will be handled in a similar way to other programming projects, even if the need is for consulting only and does not result in any Dancik programming.
- j. Customers should consider how mission critical each of their use-cases is, especially when Dancik-specific web services are used "as is". For example, if a documented Dancik web service is used, it is possible that Dancik will update that service, which may make the service cease to function as expected in your non-Dancik application. It is not possible for Dancik to know who is using our web services, and, therefore, it is impossible for us to inform you of such changes. However, if we customize a web service for you, we would not change that service except as directed by you. Therefore, for mission-critical applications you may want Dancik to create a custom version of a web service that will not be altered by our normal development efforts.
- k. All web services, including customized web services, which call underlying Dancik programs such as "get a price" and "get inventory for an item", will be automatically updated if Dancik updates the underlying programs. For example, a custom web service that uses our standard "get a price" program would remain current automatically. It would include any new logic that we introduce to the underlying pricing program. Therefore, when you utilize and/or design web services, the option to use or not use underlying "core" Dancik programs should be considered.

3. Examples of Non-Billable Web Service Activities

- a. General questions, which can be answered on Dancik's Customer Access web site or by Dancik Support such as:
 - i. Where can I find a list of documented web services?
 - ii. Is there a documented web service for getting a list of customers?
- b. Support for any web service called by a Dancik program or Dancik-developed web page;
- c. Support for any web service that Dancik has customized for you under a prior Professional Services agreement;
- d. Initial exploratory discussions such as:
 - i. "We are thinking of developing a new mobile application, and we want to know what is involved"?
 - ii. "We are thinking of linking to a third-party program, and we want to know what options we should consider"

iii. <u>Note</u>: Once a direction is established and detailed conference calls are scheduled with our programmers, your programmers and/or third-parties, then Professional Services will be required as outlined below.

4. Examples of Billable Web Service Activities

- a. Consulting with third parties such as:
 - i. Customer's web site developers
 - ii. Other software vendors
- b. Consulting with you (the customer) on projects outside of Dancik such as:
 - i. Design of your web site
 - ii. Design of other non-Dancik applications, such as
 - 1. non-Dancik mobile applications
 - 2. interfaces to third-party systems
 - iii. Technical discussions regarding how specific web services function, or could function in your custom or third-party applications
 - iv. *Note:* See exceptions cited above as non-billable exploratory discussions
- c. Creation of new web services;
- d. Creation of new versions of existing web services, including new "wrappers", new security schemes, filters, and so on;
- e. Creation of documentation for undocumented web services;
- f. Debugging or investigation of non-Dancik programs that may or may not call Dancik web services, such as:
 - i. The programs or web pages that customers or third parties write that call Dancik web services

5. Policies for Dancik's File Triggers

- a. Triggers created by Dancik for general customer use and exposed in Dancik's trigger feature will be documented by Dancik using the same methods as used for any other Dancik enhancements:
 - i. Included in normal enhancement distributions and notifications
 - ii. Documented in our DSU manuals
 - iii. Included in our web site documentation
- b. Trigger programs created by Dancik for general customer use will be covered by our DES maintenance agreements, just like any other DES enhancement. All trigger programs created by Dancik shall be managed within the DES;
- c. Trigger programs developed for specific customers will be handled through our Professional Services group;
- d. Trigger programs developed by customers or third parties have inherent risks that customers and Dancik personnel must be aware of:

- i. Though trigger programs are supported by the IBM operating system, they remain outside of the Dancik domain, yet can affect Dancik processes and the overall processing on the server. It is possible for a customer's IT staff or a third party to install a trigger program that causes problems such as:
 - 1. updates to Dancik data with unpredictable or even catastrophic results
 - 2. negative impact on system response time
 - 3. negative affects on disk usage
 - 4. violation of system security
 - 5. violation of Dancik's and/or customer's security (control panels, password restrictions, etc.)
- e. Customers have already raised concerns to Dancik about the above-stated potential dangers. Therefore, Dancik's recommendations are:
 - i. Only use Dancik-authorized triggers:
 - 1. Trigger programs that are part of Dancik's products
 - 2. Trigger programs that have been otherwise developed by Dancik or with Dancik involvement as part of a Professional Services agreement.
- f. Triggers developed for customers using our standard Professional Services agreements will consist of two components:
 - i. The trigger mechanism or "wrapper" (which until further notice should be developed by Dancik, as part of Dancik's trigger infrastructure)
 - ii. The program that is executed by the trigger (which can be developed by the customer, by Dancik, or by a third party)
- g. In order for Dancik to authorize a trigger, we would need to have programmed or otherwise inspected and approved both above-described components of the trigger, as part of a Professional Services agreement.
- h. Dancik recognizes that customers can create trigger programs without consideration to these guidelines. However, all customers should consider the potential issues with non-Dancik authorized trigger programs. Dancik can only assume responsibility for the support and maintenance of trigger programs that Dancik has developed.
- i. Anticipated (and safe) use cases include:
 - i. Using trigger programs to alert users via email or other notification systems about changes in data, such as "a back order was just filled"
 - ii. Using trigger programs to populate a third-party file such as "add a record to other data file when added to Dancik file"
 - iii. Using trigger programs in channel connectivity applications
 - iv. Using trigger programs in a "read only" process
 - v. <u>Note</u>: Dancik customers should prohibit their users and all third parties from implementing trigger programs that update Dancik data. Dancik maintenance does not cover data updates made by non-Dancik programs.

6. <u>Recommended Development Methodology</u>

- a. Dancik expects significant interest within our customer base for using web services and triggers to enhance and customize their workflows, web sites, and software.
- b. Dancik encourages customers to create a long-term strategy for the use of web services and triggers, and to share those plans with Dancik so that we can anticipate your demands as early as possible.
- c. Requests for programming and consulting regarding web services and/or triggers must be accompanied by detailed specifications. Detailed specifications should include specific information regarding the input and output for each web service or trigger, and screen mock-ups where appropriate.
- d. We recommend a retainer billing approach, where we invoice a retainer fee that covers the hours of Professional Services that you anticipate for a period of three months or more. The retainer fee approach enables Dancik to plan for and reserve our resources appropriately. We would then invoice against that retainer, and request a new retainer when the current retainer is reduced to less than 20% of its original value.
- e. You can email <u>Profserv@dancik.com</u> if you wish to have further discussions on how our services can benefit your company.

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