(U//FOUO) Atomic SIGINT Data Format (ASDF) Configuration Read Me

(U) Overview

(U//FOUO) The ASDF Configuration Read Me is designed to provide procedures for other organizations to configure their own XKEYSCORE servers tailored to their requirements and mission. More specific, it provides procedures for generating and forwarding ASDF data to FALLOUT, which then is forwarded to the MARINA repository.

- (S) FALLOUT is a DNI metadata exploitation and integrity service which converts, validates, normalizes, classifies, and distributes DNI metadata according to algorithms and rules produced by Protocol Exploitation. FALLOUT feeds corporate metadata repositories, such as MARINA, METAWAVE, FASCIA, and MAINWAY, with full-take and selected metadata derived from collection and processing systems such as TURMOIL, WEALTHYCLUSTER 2.0, XKEYSCORE, BLACKPEARL, SCISSORS, and others.
- (S) The MARINA metadata application tracks a user's browser experience, gathers contact information/content, and develops summaries of target activity. This tool offers retrieval, data aggregation, viewing, and some manipulation of specific data types collected worldwide.

(U//FOUO) Configuring XKEYSCORE for ASDF can be accomplished in three phases. First, you will address two pre-configuration requirements. Next you will configure xks.config for ASDF forwarding. Last, you will execute a group of set-up processes.

(U) Pre-Configuration Requirements

(U//FOUO) The Atomic SIGINT Data Format (ASDF) requires the following:

- The most recent StarProc update on each XKEYSCORE server that is processing data. Please see
 the Royale with Cheese Updater How To document to configure your XKEYSCORE to pull the
 latest StarProc updates.
- MAILORDER configured to pick up KLG MAILORDER files from the Master server in the \$XSCORE_DATA_DIR/outputs/mailorder directory.

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(U//FOUO) Configuring xks.config to Generate ASDF Files

- (U) Configuration for generating and forwarding ASDF can be accomplished in just five steps:
 - 1. (U) Logon as the user oper.
 - (U//FOUO) At the command line from within any directory, type viconfig and then press
 Enter. The xks.config file will open.
 - 3. (U//FOUO) In the #outputs section of xks.config, set the following configurations:
 - a. asdf output = yes : This enables the digester plugin.
 - b. asdf_trigraph = KLG : This sets the MAILORDER trigraph to correctly write out the asdf MAILORDER files.
 - c. asdf priority = 2 : This sets the priority in the MAILORDER file name.
 - (U//FOUO) In the #[processes] section of xks.config, set mailorder = yes to enable MAILORDER.
 - 5. (U) Type: wq! and then press Enter to save and exit xks.config.

(U) Additional Processes

- (U) In addition to editing configurations in xks.config, it is important to run several set-up commands.
 - (U//FOUO) At the command prompt, type xks setup processes and press Enter.
 Because MAILORDER is enabled in step 4 above (i.e., mailorder = yes), executing this command will create the mailorder proc process on the Master server.
 - (U//FOUO) At the command prompt, type xks proc start and press Enter. This will ensure all of running processes pick up any configuration changes.
 - 3. (U//FOUO) At the command prompt, type xks setup plugins and press Enter. Because The digester plugin is enabled in step 3a above (i.e., asdf_ouput = yes), executing this command will setup the digest plugin on the Master server.
 - (U//FOUO) At the command prompt, type xks rsync push_config and press Enter. This
 pushes the new plugin_config to the slaves, after running the step above.
 - (U//FOUO) On the Master server, from the command prompt, type xks proc saferestart to restart the process data parent's.