ADDS to FRAMME Integration Methodology

Introduction:

Electric Utility Companies are experiencing a great deal of growth in the area of new residential load. Much of the load is coming in the form of URD developments that have typically been designed either by manual engineering or by a template design approach. Such design methodologies are repetitive and labor intensive. Roussey Companies provides ADDS, an application that optimizes URD design and saves up to 75% on URD design costs and up to 35% on construction costs. ADDS will help utilities save up to $250 per meter in new URD design and construction. ADDS is based on Bentley's MicroStation, and as such is well suited to integration with FRAMME GIS installations.

Many of the Utilities that are interested in using ADDS to save money are using Intergraph's FRAMME for their GIS. In order to effectively use ADDS, a Utility must be able to get the design data into the FRAMME GIS without having to reenter it. Utilities want a method of getting ADDS design data files into the FRAMME GIS in an automated fashion that minimizes the need to redo work that has already been engineered.

In order to achieve this goal, Roussey Companies has teamed with Graphic Technologies Inc. (GTI). GTI has developed a mechanism for FRAMME based Utilities to use ADDS and get the resulting designs into FRAMME in a cost effective automated manner.

GTI Methodology:

GTI is an AM/FM consulting company located in Huntsville, Alabama. GTI provides software development and consulting services and specializes in Intergraph implementations in the Utility industry.

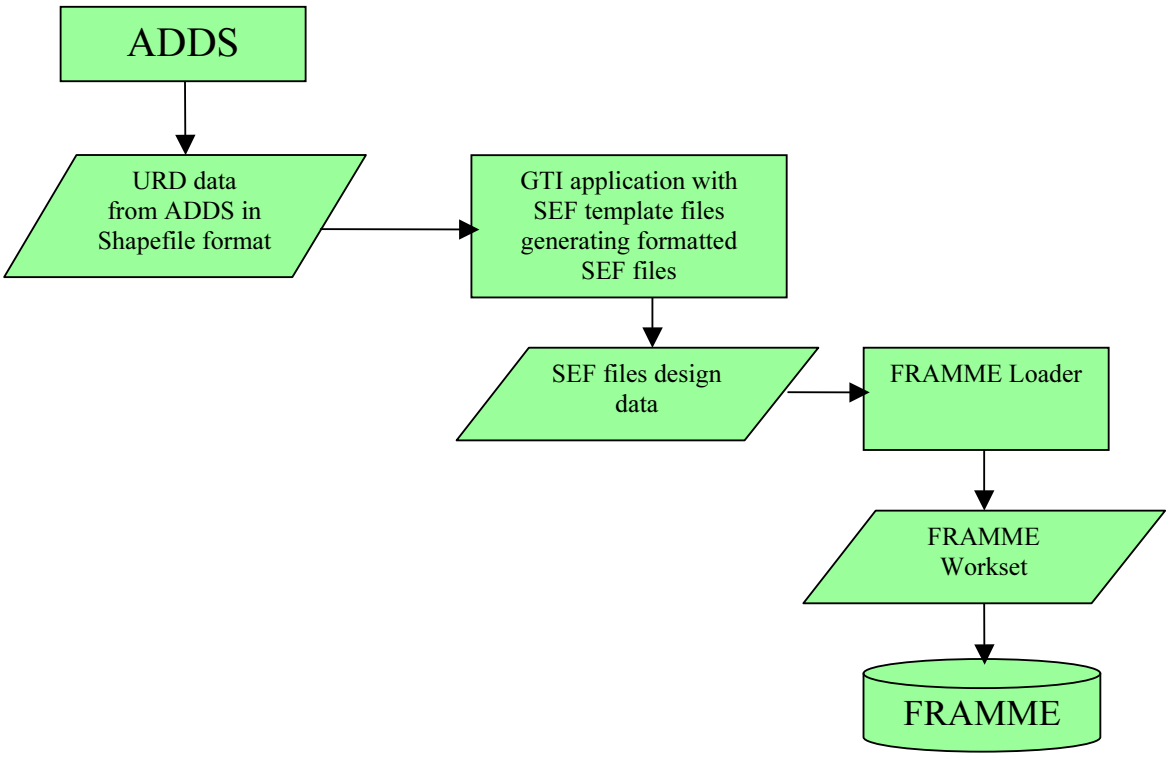
GTI has developed two approaches that can be used to bring URD designs from the ADDS environment into Intergraph's FRAMME GIS. One approach employs FRAMME Loader and a suite of functionality that GTI has developed to read Shapefiles and output an ASCII format such as SEF. The second approach is to use GTI's GTLoader to read in ADDS designs in an ASCII format and create the facilities automatically in a FRAMME session. Based on the specifics of each Utility client, one of these two approaches would be used in a production environment.

FRAMME Loader Approach –

Roussey Companies has the ability to write ADDS design files out to the Shapefile format. GTI has an application that will read a Shapefile and output formatted ASCII according to defined SEF template files. GTI will take the FRAMME rulebase and build SEF template files to populate all of the required data fields. Using the SEF template files and the ADDS shapefiles, the process creates a SEF file for the ADDS design. GTI will create a batch process that will use FRAMME Loader to create a FRAMME workset of the generated SEF file. The SEF template files allow GTI to populate attributes with defaults or with table look-ups, so that the process can populate attributes other that what comes out of ADDS.

The following diagram illustrates the process employed using FRAMME Loader:

ADDS to FRAMME Integration Using FRAMME Loader



GTLoader Approach –

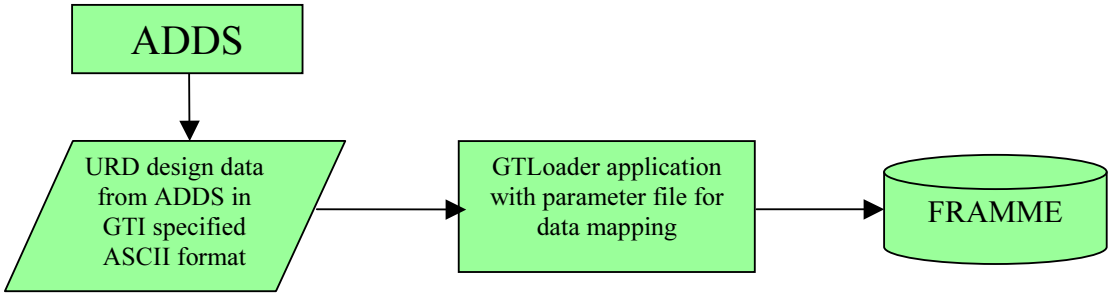
GTI has developed GTLoader, a set of FRAMME Odl code imported into a FRAMME Rusebase, which can load data into a FRAMME workset from an ASCII file. GTLoader is intended for use with GTI's GTViewer or other 3rd party software programs, to import information about FRAMME features into a FRAMME data model. Usually these FRAMME features have been extracted by various means into another software system and then inspected or modified. GTLoader will import new FRAMME features, modify existing FRAMME features, and allow existing FRAMME features to be deleted.

GTLoader utilizes a special ASCII file format to bring in the modifications to a FRAMME workset.

The URD design from ADDS will be output into the specified ASCII format. This ASCII loader file is used with a Parameter file that maps the ADDS design data to the FRAMME Rulebase. GTLoader will be used in a FRAMME session to create FRAMME data from the files. Connectivity and ownership will be created automatically and all required data will be populated in the database. This approach allows the import of design data to FRAMME without using FRAMME Loader.

The following diagram illustrates the process employed using FRAMME Loader:

ADDS to FRAMME Integration Using GTLoader



Summary:

As the Utility Industry continues to experience change, companies will pursue methods and technologies that improve productivity and save money. Utilities will need to be cost effective and competitive in a deregulated world. While pursuing enabling technologies, Utilities will find that not one single GIS can provide all the tools that contribute to successful cost-effective design. Utilities will find it necessary to select applications that best meet their business needs while not necessarily sharing the same platform. Such scenarios can be successfully managed through integration technologies that produce the desired end result. GTI has developed and demonstrated methods to take cost effective URD designs from ADDS and import them into the FRAMME GIS environment. In this manner any electric utility using FRAMME GIS can benefit from state of the art URD design methods and easily import the data into FRAMME.

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