There a 2 main programs: **Main**, which creates scenes AND feature vectors for evaluation, and **view\_facilities**, which generates several examples of each facility side-by-side for testing purposes only.

1. view\_facilities.m

Generates facilities; plots several examples side-by-side by testing.

1. Main.m

Creates a scene and associated feature vector for evaluation.

**Calls:**

* + draw\_object.m

Draws an object.

* + - draw.m

Draws a single "pixel."

* + grow.m

Increases the size of an object; used to ensure proper buffering.

* + properties\_file.m

Defines facility probabilities (terrain, SIGINT and MASINT).

* + sample\_distribution.m

Creates a 2D distribution for SIGINT and MASINT creation.

* + - spatial\_distribution\_palette.m

Distribution definitions.

**Assumes the following have been run:**

* + facility\_palette.m

Defines facility probabilities (IMINT-only; building shape, size, configuration)

* + - generate\_facility\_palette.m

Generates a facility palette containing examples of each facility. Saves for later use.

* + object\_palette.m

Specifies the spatial extent of each object. Saves for later use.

* + scene\_palette.m

Generates a scene. Pulls facilities (IMINT) from the facility\_palette, defines SIGINT, MASINT based on the probabilities in properties\_file.m, and randomly places each full-facility in the scene. Saves for later use.

* + terrain\_palette.m

Specifies the spatial extent of each water feature. Saves for later use.