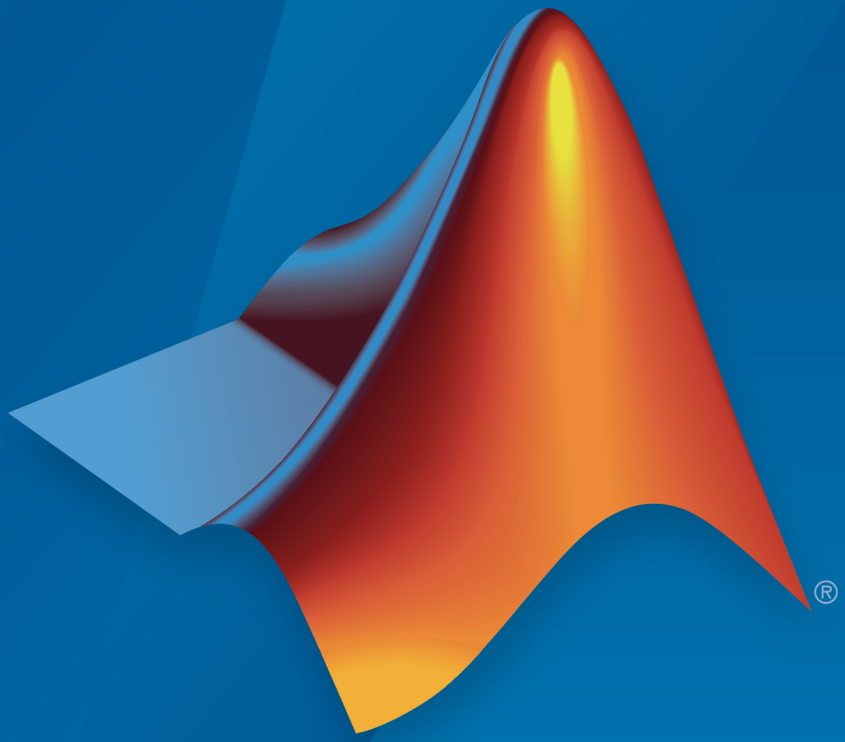
Antenna Toolbox™ Release Notes



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Contents

R2015a

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Version: 1.0

New Features

Antenna library for rapid design and visualization of metal antennas using parameterized geometry

Design and analyze the structure of 22 metal antennas including dipoles, monopoles, spirals, and patches. Use the `show` function to view the structure of the metal antennas.

Antenna array design using antenna elements

Use the Antenna Toolbox™ library of antenna elements to design `linear` and `rectangular` antenna arrays. Use the `layout` function to view the placement of the different antenna elements in the array.

Port analysis of antennas and antenna arrays

Analyze the ports of different antennas and antenna arrays using `impedance`, `returnLoss`, and `sparameters` functions.

Field analysis of antennas and antenna arrays

Analyze and visualize the radiation pattern, E-H fields and beamwidth of different antennas and antenna arrays using `pattern`, `EHfields`, `patternAzimuth`, `patternElevation` and `beamwidth` functions.

Surface analysis of antennas and antenna arrays

Determine, visualize and analyze the surface charge and current of different antennas and antenna arrays using `charge`, and `current` functions.

Antenna array analysis for the embedded element pattern and the correlation coefficient of the elements of the array

Determine, analyze, and visualize the embedded element pattern and the correlation coefficient of elements in an array using `pattern`, and `correlation` functions.

Infinite ground plane specification for analyzing balanced antennas

Analyze and visualize balanced antenna properties, such as, dipoles and bowties in the presence of an infinite ground plane.