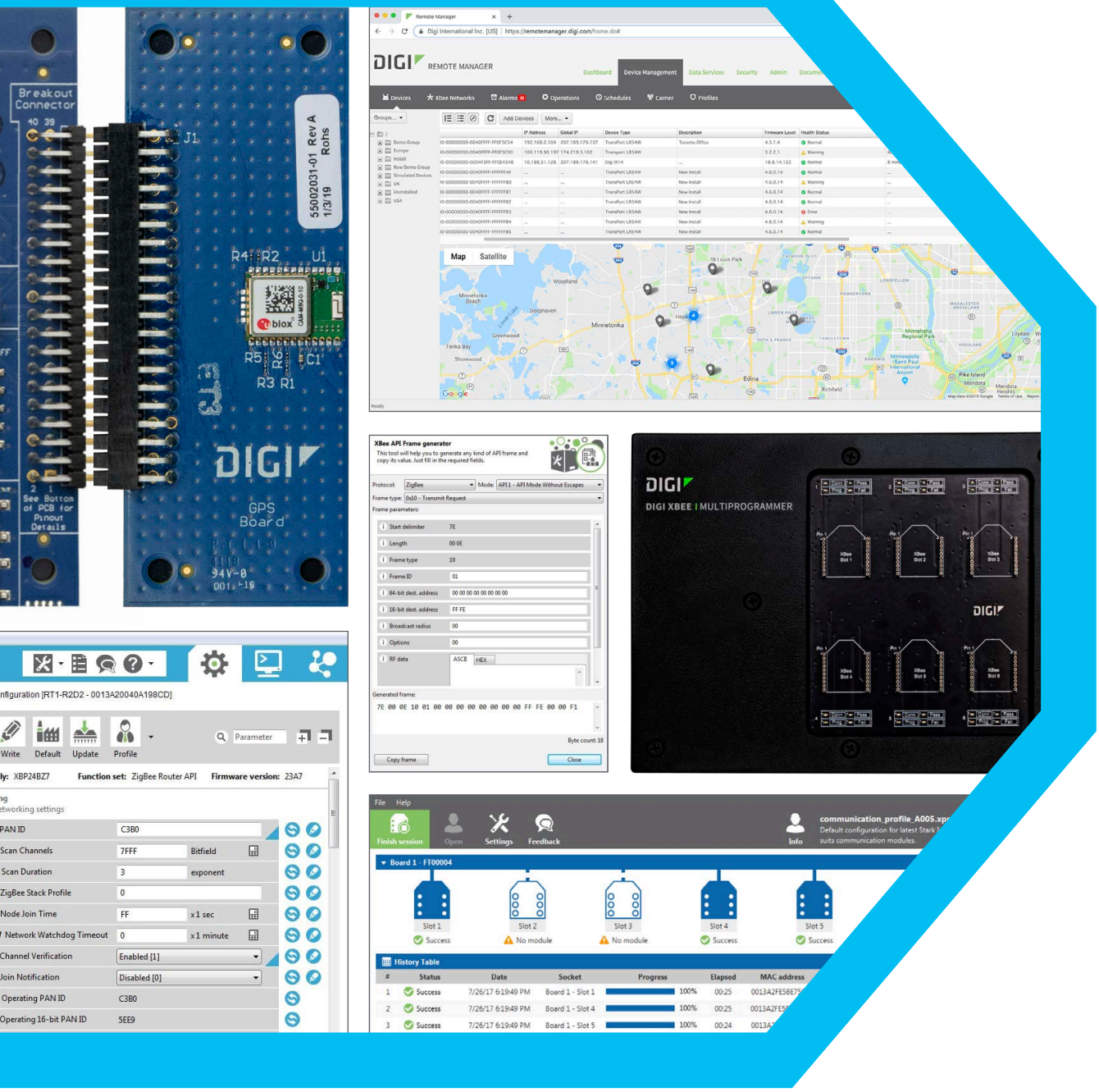


DIGI XBEE® TOOLS:

Simplifying Tasks Throughout the Product Lifecycle

Productivity, Faster Time-to-Market, Better Management

There is no denying the complexity of the product lifecycle in today's IoT environment. Cellular and radio frequency devices must be programmed, configured, and validated during development and testing. Then in the production phase, that process must be repeated at scale. Mass deployment requires network setup, mapping, and debugging. Then you need a way to manage the device network, update firmware across your deployment, and receive notifications in the event of outages or malicious tampering. What if you had expert tools to help manage and expedite the critical tasks in each of these phases of the product lifecycle? Now you do.

Introducing Digi XBee® Tools

The Digi XBee toolset supports every stage of the IoT product lifecycle — development, testing, production, deployment and ongoing management — with hardware products and downloadable software programs that simplify tasks, improve productivity, support rapid time-to-market, and help you manage your devices after deployment, even if your network grows to hundreds of thousands of devices across multiple continents.

PHASE 1 Develop

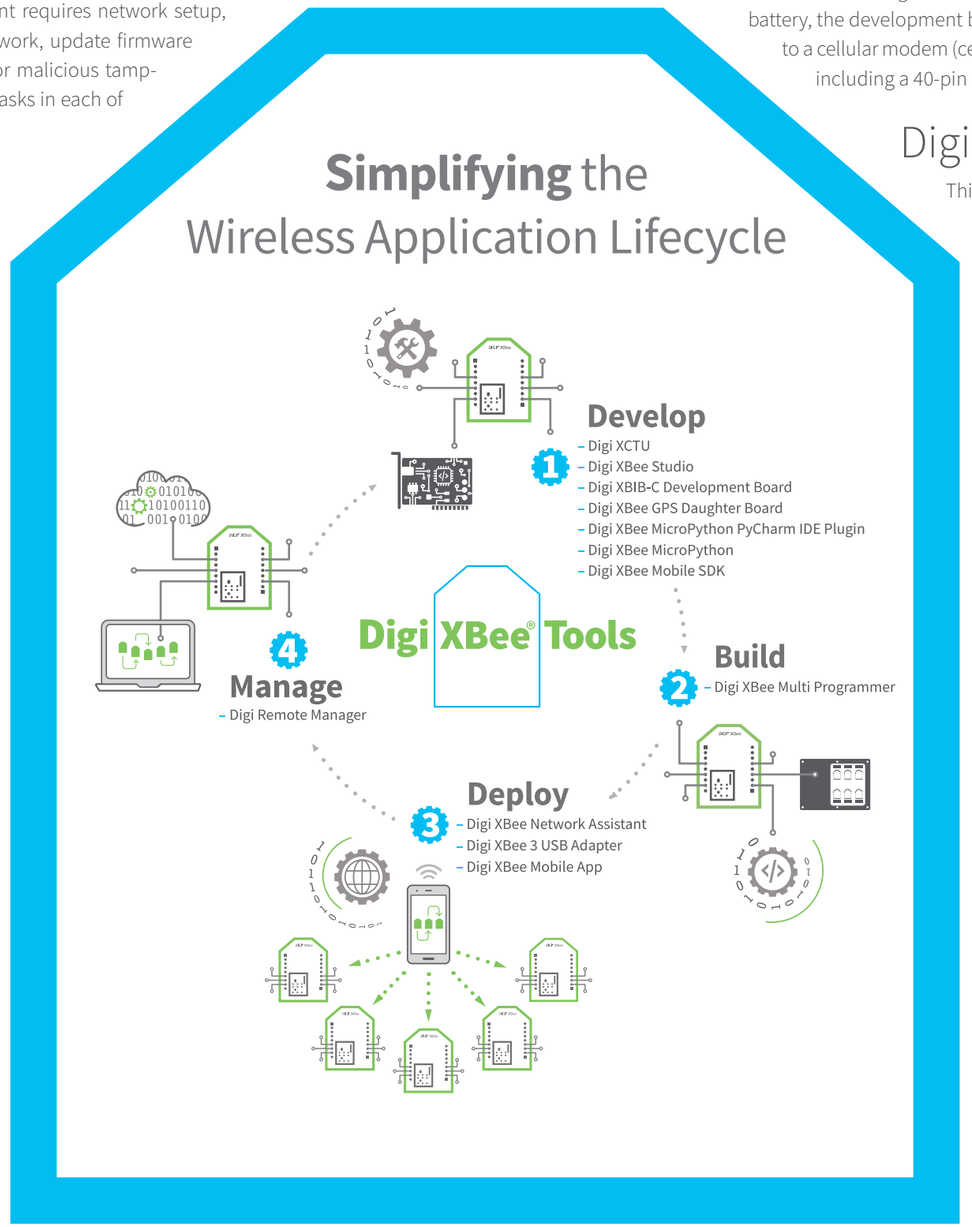
During the first phase of the IoT product development lifecycle, developers need tools to expedite the processes involved in prototyping, designing a proof of concept, and testing wireless applications.

Digi XBee Configuration and Test Utility (XCTU):

Digi XCTU® is a next-generation configuration platform for Digi XBee devices that is compatible with Windows, MacOS and Linux. A long-time favorite of XBee developers, XCTU provides a graphical view of connected Digi XBee devices and capabilities to support key developer tasks, such as configuring devices, updating firmware, and performing range testing.

Digi XBee Studio:

Digi XBee Studio is a free multi-platform application designed to enable developers to interact with Digi XBee Celullar modules through a simple-to-use graphical interface. It includes new tools that make it easy to set up, configure and test Digi XBee Cellular modules. View all of your Digi XBee devices in one table, or if they are geolocated, you can switch to the map view and see the location of each one.



Digi XBee Development Board (XBIB-C):

Digi XBIB-C is a full-featured development board for use with Digi XBee Cellular modules, supporting all form factors in the Digi XBee ecosystem – surface mount, through-hole, and micro. Powered by USB-C or battery, the development board is designed for development anywhere, and includes a USB connection to a cellular modem (cellular variants only), current consumption testing pins, and a range of features including a 40-pin expansion header for accessories such as the Digi XBee GPS Daughter Board.

Digi XBee GPS Daughter Board:

This tool is an expansion module for the **Digi XBIB-C board**. Based on the leading U-blox CAM-M8 GPS receiver, the Digi XBee GPS Daughter Board allows developers to quickly and easily add GPS location tracking to applications incorporating Digi XBee modules. Digi provides developers with complete reference design resources, including schematics, gerber files and code, as well as a MicroPython library with code examples for incorporating GPS.

Digi XBee MicroPython PyCharm IDE Plugin:

This **software plugin** offers an integrated environment for developers to program MicroPython on Digi XBee modules. The plugin streamlines the programming and flash processes, reducing the number of programs needed to develop and upload code, and making it easier to use the edge compute functionality of Digi XBee products.

Digi XBee MicroPython:

With **integrated MicroPython**, Digi XBee devices not only transmit data; now they can process small amounts of code. This simple addition makes it possible to move computation to the edge of the network, offloading network stress and reducing latency. With MicroPython, an easy-to-learn scripting and programming language, you can rapidly prototype intelligent behaviors at the edges of your network.

Digi XBee Mobile SDK:

Digi XBee Mobile SDK is a set of libraries, code examples and documentation designed to simplify the creation of mobile apps that interact with Digi XBee modules via Bluetooth®. Bluetooth enables local connectivity to Digi XBee modules via a mobile device to streamline network deployment and configuration. Bluetooth Low Energy can also be used as a communication channel to create a Human Machine Interface in a smartphone or tablet to monitor and control a device that does not have a display.

PHASE 2 Build

In the next phase of the IoT product lifecycle, the key stakeholders are those responsible for programming Digi XBee devices based on the application design.

Digi XBee Multi Programmer:

True to its name, the **Digi XBee Multi Programmer** tool provides the capability to program up to six Digi XBee devices at once, dramatically expediting the configuration of XBee modules during the build cycle.

PHASE 3 Deploy

The third phase involves rollout of the developed application to its destination in the field, network setup and integration of the application with other systems.

Digi XBee Network Assistant:

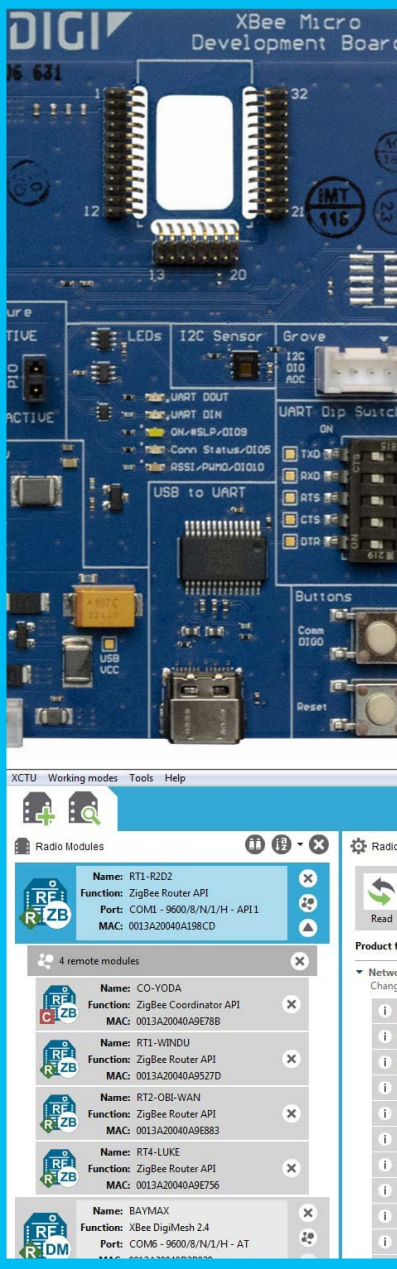
The Digi XBee Network Assistant is a desktop utility that simplifies installation and provisioning of Digi XBee devices and provides visibility into device networks once they are established. The site survey tool is designed for the needs of engineers out in the field to map the network, perform firmware updates and debug any issues.

Digi XBee 3 USB Adapter:

Designed for use with Digi XBee Network Assistant, the **Digi XBee 3 USB Adapter** simplifies local Digi XBee network setup, configuration, and debugging from a laptop or PC. The adapter supports 2.4 GHz Zigbee, 802.15.4 and DigiMesh® networks. The device contains its own antenna and works on a Digi XBee Wireless Personal Area Network.

Digi XBee Mobile App:

Available for iOS and Android devices, the **Digi XBee Mobile App** is a Bluetooth-based utility that simplifies wireless Digi XBee configuration from a mobile device. The app offers the same functionality as Digi XCTU, allowing users in the field to configure, commission, investigate and update Digi XBee modules securely from any Bluetooth-capable device.



PHASE 4 Manage

Digi Remote Manager:

Digi XBee Cellular modems integrate with **Digi Remote Manager®**, a comprehensive, central and secure IoT management platform that gives network administrators control over device networks of any size. Digi RM enables administrators to perform a range of monitoring and management tasks, from mass firmware updates to setting alerts for abnormal conditions. Once established, device profiles are automatically monitored and reset to the approved profile to prevent any malicious tampering.