



MOTOROLA DEVELOPER PROGRAM



GROW YOUR BUSINESS WITH MOTOROLA SOLUTIONS

Institutions around the world are looking to do more with their Workgroup Communication systems - enhancing capabilities beyond voice, expanding data features, empowering new generations of users. Motorola Solutions' Developer Program seeks to help them harness the full potential of their investment by enabling a wide range of customized applications that enhance business processes and increases efficiency.

Through our Application Developer Program, we are looking to collaborate with you to provide those value adding applications. As the largest supplier in the market we will provide you access to a wide installed base of Workgroup Communication systems. From devices to systems, broadband to TETRA, ASTRO to MOTOTRBO™ and across multiple vertical markets, we have the most established and comprehensive portfolio and we are here to help you develop your applications and get them ready for the opportunity this customer base represents.

Being a Motorola developer gets you access to the tools you need to create applications, the testing tools to ensure seamless implementation, and many go-to-market opportunities to increase your reach.



WHY JOIN?

Developing your first application or looking to expand the feature set of your current applications? Maybe you're looking to extend the reach of your application to other network technologies or to other markets?

Our program will empower you with the tools you need to fast-track your application development whilst enabling you to leverage the Motorola brand and market leadership.

Program benefits

- Enhance the proposition of your product by integrating with the Motorola portfolio including ASTRO, MOTOTRBO, TETRA, Broadband networks and devices
- Rapidly develop using industry standard, REST based API's , documentation and development tool sets to create products and applications
- Opportunity to fast track penetration into new markets, new verticals and new customers by leveraging Motorola's go to market channels
- Gain access to specialised technical support to ensure your application runs seamlessly from the first deployment onward
- Opportunities to test your solution in our dedicated test environments before going to market

NUMEROUS OPPORTUNITIES FOR GROWTH

Working with Motorola offers access to the world's largest installed base of workgroup communication technologies. As our partner we offer you many ways to expand your reach.

APPFORUM EVENTS

Accredited Application developers and Motorola Solutions engineers gather every year at the AppForum for a comprehensive update on all the latest technical developments and tools. This event enables you to participate in detailed breakout sessions, hands-on workshops and a product fair. The AppForum provides you with a unique opportunity to meet Motorola experts face-to-face to gain insight into our future product plans and to raise specific questions related to your solutions. It is also an ideal forum to network with industry peers and share experience.

BRAND ASSETS & CERTIFICATES

Promote your status as an accredited Application Developer with official certificates and logos that enable you to leverage the Motorola Solutions brand in your marketing programs.

CASE STUDIES

Share your success stories about how customers have deployed your solutions to overcome challenges and improve productivity. Prepared with a specialist agency using Motorola's brand template, case studies provide you with a compelling sales tool to demonstrate how potential customers can benefit from your solutions.

NEWSLETTERS & WEBINARS

Quarterly newsletters are our primary communication tool for keeping our developer partners up to date. They contain all the latest developer program news, including description of exclusive features, new software releases and useful case studies which increase sales. Regular webinars will also help you keep informed about all the latest developments.

APPLICATION CATALOGUES

Through our program you can bring, with Motorola, specialized applications to the marketplace. We offer you the chance to utilize our marketing tool, the Motorola Applications Catalogue, in order to successfully launch your solutions to the marketplace. This powerful tool has proven to be our customers' preferred source for finding and learning about new applications. Inclusion in it enables you to showcase your solutions and highlight the value of your quality applications to resellers, distributors and end users.

DEVELOPER DAYS

Specific events for rapid development of applications. These sessions are hands on with the support of Motorola development engineers in the room to answer questions and provide guidance.



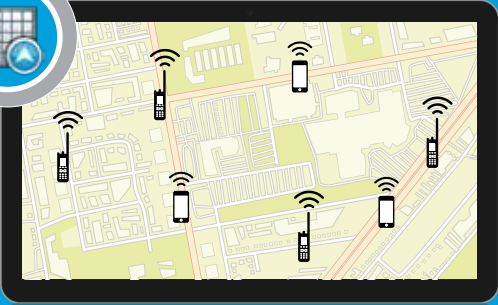
INTELLIGENT MIDDLEWARE FOR ASTRO, TETRA AND BROADBAND NETWORKS

The world of Mission Critical workgroup communications is changing. Applications are at the heart of a network of networks, driving efficiency, increasing productivity and enhancing safety. From land mobile radio to private broadband, personal area networks to carrier networks – this multi technology environment requires applications to run seamlessly over many different systems.

Whether creating new applications serving new use cases or porting and adding functionality to existing applications, understanding the complexity of developing for multiple technologies takes time and money. Motorola's Intelligent Middleware is a powerful set of services that:

- Allows the quick realisation of new concepts and new use cases, allowing you to rapidly respond to customers requirements and speeding time to market for new applications
- Enhances existing applications, removes development complexity and reduces costs by ensuring effortless communications between land mobile radios and Broadband systems and devices

There is no cost to join the Intelligent Middleware developer program, and the APIs are free to licence to our developer partners. We currently support the following services on ASTRO, TETRA and Broadband LTE networks services on both smartphones and web services:



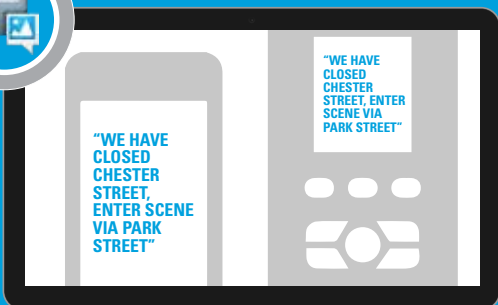
Location and mapping

Allows an application to identify the location of the radio or Broadband device and see whether it is currently available on the network. Imagine an officer is not responding to an incident. Now you can see exactly where that officer is, regardless of whether he's using a radio or smartphone, and get another officer close by to investigate. Responding officers can also view the map on their smartphone and see the location of the incident and their colleagues, quickly plotting a route to help. Location and Mapping displays users on screens of any size, control room or smartphone, giving one overview to everyone.

Group management

The incident escalates. You need to bring officers together and quickly plan an effective response. With Group Management, you can create ad-hoc groups including smartphones and radios, then communicate using Push To Talk or text messaging. If you need to send video such as a CCTV clip, create a group composed only of officers with broadband devices. Create geofenced groups easily by selecting officers on the map, either in dispatch or on your smartphone.



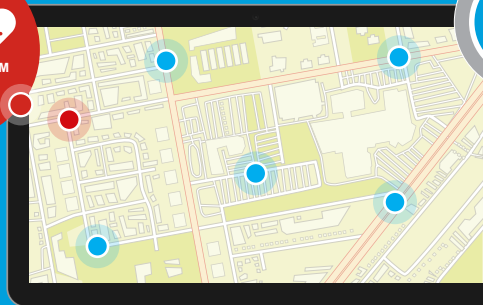


Messaging

Arriving at the scene of a multiple car crash, an officer finds a whole street blocked by vehicles. She texts colleagues to advise them to approach the incident from another direction. Intelligent Messaging allows her to send this text to an individual as well as an existing or newly created talkgroup, no matter what device or system they are using. Now everyone can respond faster and more effectively.

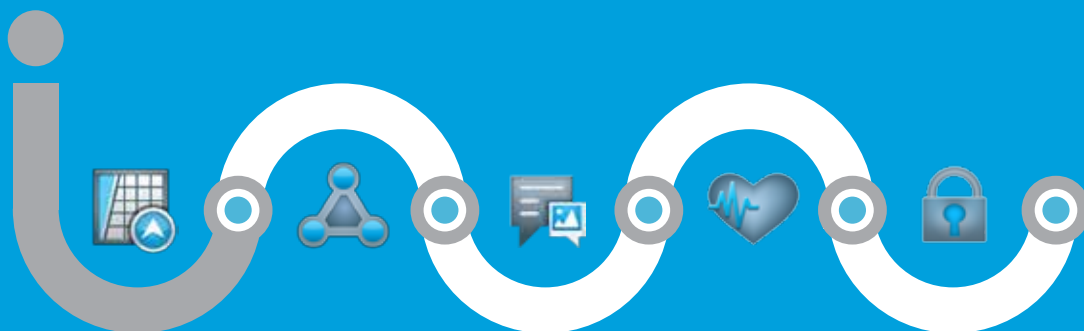
Context

Investigating a break-in, an officer unclips and draws his weapon. Sensors on his holster, together with a heart rate monitor registering increasingly intense activity, makes command immediately aware that an incident has escalated. The time saved, possibly minutes, can be critical in ensuring the safety of the officer. You can monitor developments as they happen and direct other officers to provide assistance if necessary.



Security

Wherever officers go, you can be sure their communications will not be compromised. Using a mobile virtual private network, all data from any device is encrypted and sent through one secure IP tunnel to one secure IP address. Multiple applications are authenticated with a single sign on, saving time and ensuring only the right users gain access. Officers can now avoid the risk of an application dropping as they move between networks.



Many of the Intelligent Middleware services can be used in conjunction allowing creation of powerful highly contextualised capabilities and solutions. For example - using mapping and group management to create a group based on "who's near me" or using Mapping and Context to create an automatic alert, with location, when a partner's bio data is outside of set boundaries.

For the full list of services please contact us at <http://developers.motorolasolutions.com>

Other services for our land mobile radio and broadband networks include:

Computer-Aided Dispatch (CAD)

Calls are coming in, resources have to be managed, CADI allows faster calls handling and more efficient resource allocation by providing a central interface for workflow management applications to access the radio network. This makes it easy to share information with users in the field for the best situational intelligence, and with other departments and agencies for better cooperation, coordination and collaboration.

Data / Telemetry

Complex operations covering hundreds of square miles present some complex management challenges, including managing resources and assets in remote locations and difficult terrain. No matter how remote, these must be monitored and controlled 24/7. Enabling applications to utilize the radio system to send and receive data provides an efficient and effective way to solve this problem.



MOTOTRBO DEVELOPERS

Since its introduction in 2007 over 4 million MOTOTRBO radios have been deployed on thousands of trunked systems in over 150 countries across 6 continents. MOTOTRBO has proved itself as the go-to technology for companies around the world – connecting people wherever they need clear, instant and reliable communications. The success of MOTOTRBO has led to a significant market desire for solutions that enable organisations to expand the functionality of their digital radio with integrated applications such as text messaging, location-based services (LBS) and telemetry as well as the capability to customise solutions using an internal option board.

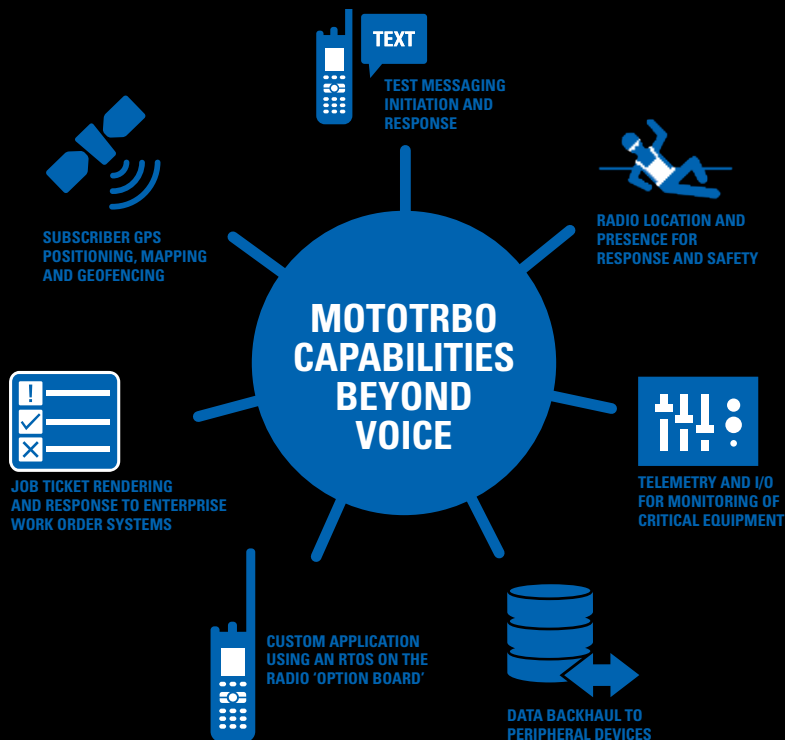
MOTOTRBO developers are soft- and hardware developers and system integrators who have proven their expertise and commitment to deliver high quality, integrated and customer-

focused applications for a wide range of industry sectors and the Motorola Developer program is here to help you service the demand for solutions and quickly get you to market.

MOTOTRBO ADKs

MOTOTRBO ADKs consist of protocol specifications and development guidelines to provide you with technical references as well as specific domain knowledge that will enable you to successfully develop your solution. They include software, electrical and mechanical specifications for our interfaces such as USB, IP Backbone, Option Board, or Bluetooth.

The MOTOTRBO Developer support team provides access to sample code and sample applications as well as to tools for interface and system analysis.



APPLICATION SERVICES AVAILABLE FOR MOTOTRBO

1. Data Services - including:

- a. **Device Discovery** - Presence and capability information for subscriber radios in the network is available for the Wireless and Wireline Application Topologies. Through the Device Discovery Service, an application can use knowledge of radio presence and capability to optimize the delivery of data to and from the MOTOTRBO user.
- b. **Location Service**- Location data for a GPS-enabled MOTOTRBO subscriber radio may be reported upon an immediate request, a pre-defined trigger, or an emergency call. Positioning information includes latitude, longitude, altitude, or speed.
- c. **Text Messaging Service (TMS)** - Full display subscribers are text message capable for one-to-one or one-to many short messaging. Select MOTOTRBO subscriber models also support Job Ticketing System (JTS) which is an enhanced messaging feature optimized for work order management solutions. TMS provides short messaging and job ticketing capability to an application.
- d. **Telemetry I/O Service** - Remote I/O control and monitoring of logic level-based external devices is available through TIOP. Select MOTOTRBO subscriber models support TIOP by providing application access to the radio's accessory connector I/O pins.
- e. **Raw Data Service** - Since MOTOTRBO is an IP-based communications system, generic UDP/IP communications for Raw Data is inherently supported. Small-to-medium sized "bursty" data is an ideal payload to transport over-the-air using MOTOTRBO.

2. Audio Operation - includes the communication, filtering, and enhancement of audio as it is transmitted and / or received within the MOTOTRBO radio system. Subscriber radios support the injection and recovery of audio in the analog domain via the radio accessory connectors as well as in the digital domain via an Option Board.

3. Extended Control & Management Service (XCMP) for Subscriber - typically used to extend the capabilities of the MOTOTRBO subscriber radios' standard feature set. XCMP enables a 3rd party application to have direct interaction and control with the radio's features and ergonomics in order to supplement the user experience of the radio. Audio Operation applications are enabled by the use of separate connections for audio in conjunction with XCMP.

4. Infrastructure Application Services - available through a UDP/IP connection to the MOTOTRBO infrastructure. These interfaces are subclassified into Gateway Application Services and Repeater Application Services and are available for all modes of MOTOTRBO system operation. Via IP the access to Services for Data, RSSI Reporting, Link Establishment, Control Signaling, Remote Call Event Monitoring Control & Management of Repeaters as well as Audio Recording will be provided.

For the full list of services please contact us at www.motorolasolutions.com/developers

INTERESTED IN FINDING OUT MORE?

CONTACT US AT
WWW.MOTOROLASOLUTIONS.COM/DEVELOPERS

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Motorola Solutions Ltd. Jays Close, Viables Industrial Estate, Basingstoke, Hampshire, RG22 4PD, UK.

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