iBwave Wi-Fi® Suite

THE FASTEST WAY TO PLAN, DESIGN AND ENSURE CARRIER-GRADE Wi-Fi

When it comes to planning and designing indoor Wi-Fi networks, three of the largest challenges companies face are the time and money required to deploy networks, guaranteeing network quality to keep the end users satisified, and ensuring simple maintenance and upgrades in the future.

iBwave Wi-Fi® Suite is a powerful platform that solves all of these challenges by providing you with a powerful Wi-Fi network planning and design solution which significantly reduces deployment times, ensures carrier-grade Wi-Fi, and simplifies future maintenance and upgrade activities. With iBwave you also get access to iBwave's certification program to instill proficiency and best practices for your entire team.

iBwave Training & Certification
Interactive learning to facilitate best practices for in-building wireless network planning and design

iBwave Cloud

iBwave Wi-Fi®
Powerful Wi-Fi network planning & design software

iBwave Wi-Fi Mobile
A mobile app for site surveys and preliminary network designs

iBwave Unity
Cloud-connected central hub to view and manage all your sites

Accelerate Wi-Fi deployments by 50%	**Ensure carrier-grade Wi-Fi**	**Reduce project costs by 30%**	**Collaborate with project partners**	**Manage all your projects from a central hub**

iBwave Wi-Fi® Suite

ACCELERATE Wi-Fi NETWORK DEPLOYMENT TIMES

From site survey to post-deployment maintenance, use the iBwave Wi-Fi Suite through all phases of your Wi-Fi network projects to streamline your network planning and design activities. The result? Win bids faster, finish projects sooner, and maximize your ROI.

- **ALL-IN-ONE SITE SURVEYS.** Use iBwave Wi-Fi Mobile app on a tablet to do active and passive surveys, capture site documentation and notes on the digital floor plan, identify capacity requirements by zones, start a preliminary design on-site and assess potential performance with heatmaps. Then save it all to the cloud to access on the desktop.
- **FULL NETWORK DESIGN AND VALIDATION.** Design your network from our large database of vendor-modeled network components. Model cable trays and rises, route cabling with automatic cable alignment, place switches, routers, closet equipment and place your APs manually or automatically. Validate your design as you go and impress your customer by showing them the entire design of a network in 3D.
- **ADVANCED REPORTING AND DOCUMENTATION.** Easily generate a full Bill of Materials, costing reports, annotation reports, compliance reports and more with our advanced reporting.

- **ADVANCED 3D PREDICTION & HEATMAPS.** Model your venues with inclined surfaces, curved walls, diagonal drawing, all in advanced 3D. See live signal strength predictions as you design with smart antenna contouring, calibrate prediction using live measurements, and use iBwave Wi-Fi's extremely accurate prediction engine to simulate network performance.
- **CLOUD COLLABORATION**. Help your field and office teams stay in sync with iBwave Unity, our cloud-based site management tool that keeps all project information synchronized in one location. Have a field tech do a site survey then upload all information to the cloud where a co-worker can easily open the project and continue the design work at the office. When the design is done, save it back to iBwave Unity where it can be accessed during validation or later on for maintenance.

iBwave Unity

All of your projects, documentation, and data located in one location.
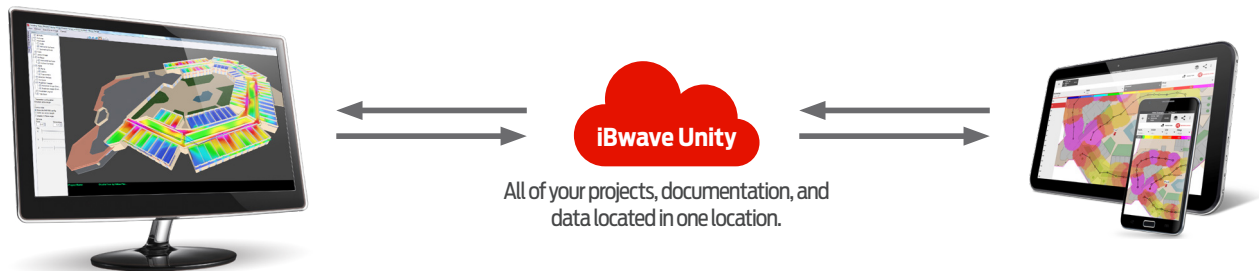
ENSURE CARRIER-GRADE Wi-Fi

Use iBwave Wi-Fi's powerful prediction engine to accurately simulate network performance and demonstrate KPI compliance.

- **ADVANCED 3D MODELING.** Model incline surfaces and curved walls, and assign signal loss for both 2.4GHz and 5GHz to maximize prediction accuracy.
- **ADVANCED CAPACITY PLANNING.** Identify capacity requirements for an entire floor and/or for a specific area of a floorplan. View capacity results in a 3D capacity pass/fail heatmap or in an average data rate per use heatmap.
- **POWERFUL PROPAGATION.** Ensure network quality and KPI compliance with our extremely accurate propagation engine to accurately simulate the performance of the network before deployment in 3D.
- **PREDICTION CALIBRATION.** Take prediction accuracy one step further by calibrating prediction results with live measurements collected during the site survey. The result? A significantly smaller risk of post-installation troubleshooting costs.
- **COMPLIANCE CHECKS AND REPORTS.** Show the KPI Compliance and Prediction Vs. Measured Data Reports to give your customer confidence in the design and expedite approval.
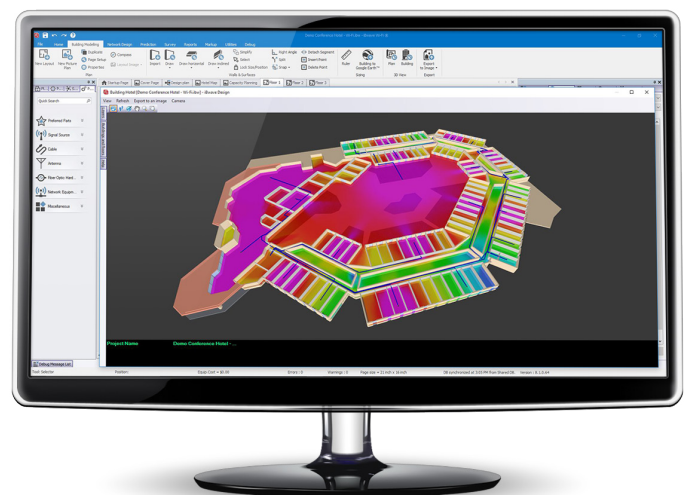
iBwave
Wi-Fi® Suite

REDUCE PROJECT COSTS BY 30%

With intelligent design automation and optimization capabilities, iBwave Wi-Fi gives you both faster project times as well as optimized designs that do not cause unnecessary equipment expenditures.

- ● **AUTOMATIC ACCESS POINT PLACEMENT.** Using iBwave Wi-Fi or iBwave Wi-Fi Mobile you can optimize your design with automatic AP placement.
- ● **SMART ANTENNA CONTOURING.** Eliminate the time it takes to run prediction over and over again by seeing live prediction results of Access Points as you place them on the design.
- ● **ACCURATE PREDICTION AND DESIGN OPTIMIZATION.** iBwave Wi-Fi has a powerful propagation engine that ensures the network you design is optimized and will work as designed once deployed. For you this means significantly less troubleshooting costs post-deployment, and eliminating the risk of overspending on network equipment that is not needed.
- ● **AUTOMATIC ERROR CHECKING.** Catch design errors or issues as the network is designed to ensure accuracy of the design and eliminate the risk of post-deployment troubleshooting costs.
- ● **COST DETAILS.** Ensure you stay on budget as you design by assigning network parts (APs, routers, switches, cables, etc) costs and construction costs
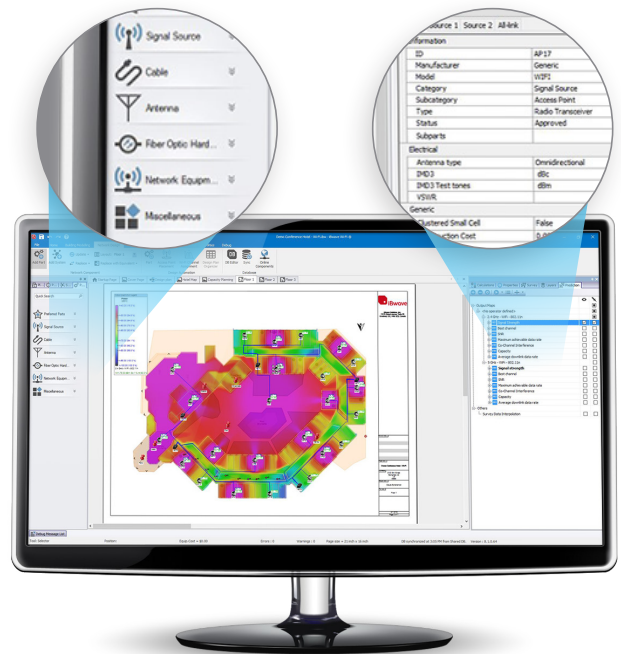
SEAMLESS COLLABORATION WITH YOUR PROJECT PARTNERS

By using iBwave Unity, all of the work done in iBwave Wi-Fi Mobile and iBwave Wi-Fi on the PC will be synchronized and easy to access and share by all from a single location in the cloud.

- ● **CLOUD CONNECTIVITY.** Keep all your site information synchronized and available in a single cloud location in iBwave Unity. Easily share files and work with project partners via the cloud, eliminating coordination issues.
- ● **iBwave VIEWER FOR STAKEHOLDERS.** Send design files to customers and project partners knowing they can easily open and review the files in 3D with iBwave's free read-only 'iBwave Viewer' software. They can even run some of their own reports.

- ● **WORFKLOW MANAGEMENT.** Plan tasks, estimate time and costs, and assign resources, in project plan in iBwave Unity. Setup workflow notifications to enable better team collaboration and alignment with the set schedule and budget.

iBwave Wi-Fi®

iBwave Unity

iBwave Wi-Fi® Mobile

iBwave Wi-Fi® Suite

MANAGE ALL YOUR NETWORK SITES FROM ONE CENTRAL HUB

Use the cloud-connected iBwave Unity software to view and manage all of your Wi-Fi network design projects in a single location.

- **FULL VISIBILITY OVER ALL PROJECTS.** View and track all of your projects, historical or active, in a single location in the cloud.
- **ACCESS TO PROJECT DOCUMENTATION FOR FUTURE MAINTENANCE.** Easily access historical as-built documentation and site documentation in iBwave Unity during any future maintenance or upgrade projects.

- **ADVANCED REPORTING AND BUSINESS INTELLIGENCE.** Gain business intelligence and make better informed decisions with the ability to run cost and project reports across all of your projects.
- **WORKFLOW MANAGEMENT.** Empower project managers with project templates where they can track tasks, resources and costs in a simple and synchronized way.

FEATURE SET

Included Software
- iBwave Wi-Fi Mobile (Android app)
- iBwave Wi-Fi (PC software)
- iBwave Unity (Cloud)

Site Surveys (iBwave Wi-Fi® Mobile/iBwave Wi-Fi®)
- Active and Passive survey measurements
- Continuous Walk survey mode in iBwave Wi-Fi® Mobile
- Integrated Active Survey Server (NetScan)
- Create buildings and import floor plans
- Capture site images, videos, and notes and save to geo-located pushpins on floorplan
- Draw and add text annotations to images
- Automatically or manually place APs
- Draw construction markup and cable routes
- Identify capacity zones and requirements
- Generate performance HeatMaps on-site
- Multi-Dongle Surveys iBwave Wi-Fi for PC
- Save all site survey data to the cloud in a single project file

Venue Modeling (iBwave Wi-Fi®)
- Multiple Buildings and Multi-Layered Floor plans
- Import floor plans (image or PDF) and walls (PDF or CAD)
- Draw linear or curved walls and surfaces with the ability to incline
- Automatic Inclined Surfaces
- Assign materials or create your own
- Display floor or entire building and network design in a 3D Viewer
- Show building location in Google Maps or Bing
- Export to Google Earth

Network Design (iBwave Wi-Fi®)
- Design complete network from large database of vendor-modeled network components: APs, cables, switches, routers, controllers, racks, cabinets, and more
- Route cabling and automatic cable length measurements
- Model cable trays
- View complete network in 3D viewer
- Identify capacity requirements for a specific area or an entire floor
- Automatically or manually place APs
- Multi-Radio APs support
- Smart Antenna Contouring that gives live signal strength predictions
- Automatic Channel Assignment

- Automatic Error Checking and Design Validation
- Automatic Design Plan Organizer
- Database Editor to Add or Update existing network components (APs, switches, routers, etc.)
- Zigbee support
- Mist integration

Propagation
- Simultaneous multi-band propagation
- 3D prediction analysis
- Variable Path Loss Exponent (VPLE), Cost 231 Multi-Wall or Fast Ray Tracing propagation models
- Probe to examine prediction results
- Compliance results and report based on user defined criteria
- Prediction model and material collaboration from survey data

Heat Maps (iBwave Wi-Fi / iBwave Wi-Fi Mobile)
- Signal Strength (RSSI), Max Achievable Data Rate (MADR), and Signal to Noise Ratio (SNR)
- Best AP and Channel
- Co-channel interference (CCI), AP Count and Overlap Zone
- Capacity Pass/Fail, Average Data Throughput per user

Project Reporting and Documentation (iBwave Wi-Fi®)
- Annotations, Output Maps, Survey Reports
- Equipment List and Cost Details Report
- Access Points, Cable Routing and Cross-Reference Reports
- Prediction vs. Measured Report
- Compliance Report
- Free iBwave Viewer for stakeholders

Project Management and Cloud Collaboration (iBwave Unity)
- Integration with iBwave Wi-Fi Mobile and iBwave Wi-Fi (PC)
- Centralized project repository of all information
- Version control of design files
- Project documentation and data synchronization
- Built-in search engine to quickly locate projects
- Cross-Project Reporting and Dashboards
- Project Workflow Management
- API to integrate with 3rd Party Tools