NOTIFIER®
by Honeywell

NOTIFIER
Solutions Playbook

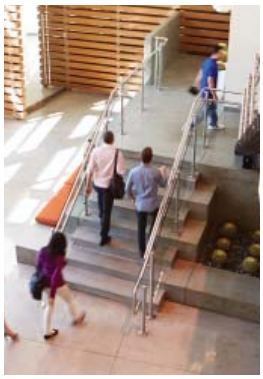






Table of Contents

About the Playbook 4

The Opportunity 7
- For Your Customers 8
- Why NOTIFIER? 9
- Elevator Speech 10

Segmentation & Sales Drivers 13

Good/Better/Best Walk 21

The Sales Process 23
- Inquiry Phase – Understanding risk from the customer's perspective 24
- Sales Phase – Developing solutions, presentations, and proposals 32
- Technical Phase – Demonstrating the value of a NOTIFIER networked solution 44
- Revisit, Revisit, Revisit 45

Product and Service Solutions 47
- Advanced Detection 52
- Wireless Fire Detection 58
- Gas and Flame 59
- Networking and Integration 60
- Emergency Communications Systems (ECS) 70
- eVance™ by Honeywell - Service and Inspection Management Software 78
- Honeywell Fire Services Group 79

Reference Section/Toolkit 80
- Opportunity Checklist 81
- Web Information and Resource Sources 84
- Case Studies 85
- Funding 106

Honeywell Confidential. For internal use only.

About the Playbook



About the Playbook

With NOTIFIER's solutions of products, you can design beyond-the-code, total life safety solutions that ensure growth for your business and superior protection for the people, property and assets that matter to your customers.

Decades of excellence and innovation have established NOTIFIER as a trusted leader in the life safety industry. By delivering solutions that add value to our end users' operations, we will drive that legacy into the future.

As a key partner, you may have some questions about the most effective way to sell NOTIFIER solutions. The Playbook is designed to give you the strategies and tools you need to capitalize on this growth opportunity.

Honeywell Confidential. For internal use only.

About the Playbook

What will we be learning in the NOTIFIER Solutions Playbook?

The NOTIFIER Solutions playbook will walk you through the complete product offerings, opportunities, define market segmentation, comprehensive sales process and support tools. The case studies show these benefits in action for a wide range of NOTIFIER customers.

How does this benefit my customers?

The Product and Service Solutions section explains the features and benefits of NOTIFIER's line of products that they did not know that NOTIFIER can provide.

What's in it for me?

In ***The Opportunity*** we show how NOTIFIER's beyond-the-code solutions can help you address the risks that matter to your customers, enabling you to provide better, more responsive service while positioning your business for future growth and reoccurring revenue.

What is the best way to begin a conversation about providing the best NOTIFIER Solution?

Our ***Elevator Speech*** is a quick tour of the Who, What, How and Why of NOTIFIER's solutions—one that can help you start a conversation anytime, anywhere.



Honeywell Confidential. For internal use only.



About the Playbook

How do I identify prospective customers and their needs?

In the ***Segmentation and Sales Drivers*** section, we demonstrate a method for grouping customers based on their needs and priorities. This approach can generate important insights about which of your customers will realize the most value from the networking and integration technologies NOTIFIER offers. The Best Opportunities section offers additional guidance about which customers may be the strongest candidates for sales growth within your region.

What should I do next?

The Sales Process section will walk you through all the key steps, including inquiring with key influencers, developing solutions, preparing and delivering a presentation, responding to customer objections, addressing competitive comparisons and following up to close the sale.

Can these solutions be implemented in phases?

Yes. The ***Good/Better/Best Walk*** shows the real-world benefits of NOTIFIER life safety solutions at each phase of implementation.

Where can I find technical information and other resources?

Our Reference Section/Toolkit includes links to datasheets and engineering specifications, an opportunity checklist and funding information.

Honeywell Confidential. For internal use only.

The Opportunity

Risk	NOTIFIER Solution
Evolving threats, such as terrorism, extreme weather, and violent intruders	Emergency communications systems (ECS) give safety personnel the tools they need to respond in real-time with specific warnings and directions, helping occupants take appropriate action.
Protecting sensitive assets, including critical infrastructure, data, inventory, volatile materials, historical artifacts, etc.	Centralized monitoring and advanced detection solutions provide reliable early warning, enabling personnel to respond to hazards before serious damage occurs
Lost revenue due to downtime or customer/guest inconvenience	Advanced detection and monitoring solutions can prevent unnecessary shutdowns and evacuations due to false alarms.
Customer brand value	Your strong reputation and NOTIFIER's proven quality will protect the customer's brand.

For Your Customers

Though a complete NOTIFIER Life Safety solution requires a more sustained sales effort than traditional fire alarm systems, they represent a tremendous opportunity for your business—one supported by real market demand. The concerns listed here are just some of the risks that may be important to your customers.

Honeywell Confidential. For internal use only.

The Opportunity

For Your Customers

If your business operates in the bid/spec market, designing price-based solutions that only meet the current code, you may find yourself winning today but continuing to chase new business tomorrow. Going beyond the code with NOTIFIER's Life Safety solutions is an opportunity for your business to expand into the negotiated market, where buying decisions are based on the long-term value offered by your proposed design. As your customers' operations change and new technologies emerge, a NOTIFIER can pave the way for future growth on existing installations and the reoccurring revenue that generates.

For NOTIFIER systems connected to the Internet through a web portal, we also offer eVance Services, a suite of cloud-based software applications that can enhance the profibility of your installation and service business.



Honeywell Confidential. For internal use only.

The Opportunity



Why NOTIFIER?

NOTIFIER has been a leader in the fire alarm industry for more than 60 years. Decades of excellence have earned NOTIFIER and our distributors a reputation as a trusted provider of life safety solutions. Today we are the largest manufacturer of engineered fire alarm systems in the world with over 400 distributors globally, and we continue to lead the way with most advanced networking and integration technologies on the market.

Every NOTIFIER solution comes with strong corporate backing, which includes substantial resources, ongoing investments in R&D and regional support operations on every continent.

Our commitment to our products and partnerships is the reason NOTIFIER stands proudly above the rest.

Honeywell Confidential. For internal use only.

The Opportunity

Elevator Speech

You should always be prepared to deliver a short, powerful description of NOTIFIER's Life Safety solutions. Here are some suggested topics:

WHO

- NOTIFIER is a trusted leader in life safety technology with more than 60 years of industry experience.
- Our reputation for excellence and innovation has made us the world's largest manufacturer of engineered fire alarm systems with over 400 distributors worldwide and regional support operations on every continent.
- Made in the USA
  - Research and Design
  - Marketing
  - Training/Technical Support
  - Manufacturing

WHAT

- NOTIFIER and our Engineered Systems Partners can design, manufacture, install and service total life safety solutions for any application.
- Our NOTIFER Life Safety Systems offer superior control and survivability
- Life Safety System State-of-the-art technology:
  - Emergency Communications Systems (ECS)
  - Advanced Detection
  - Gas/Flame Detection
  - Integration with security, building automation and industrial control systems
  - First Responder navigation tools
  - Remote monitoring from anywhere in the world
- NOTIFIER's products are backward compatible with older systems and can expand to grow with your enterprise in the future.



Honeywell Confidential. For internal use only.

The Opportunity

Elevator Speech

HOW

- Every NOTIFIER Life Safety solution is tailored to the meet the specific needs of your customers.
- All of NOTIFIER's solutions are flexible and scalable, allowing customers to phase-in new technologies as budgets and construction schedules permit.
- NOTIFIER and our Engineered Systems Distributors are true "Partners" in providing the customer with the BEST world-class products and support.



WHY

- When seconds count, NOTIFIER's powerful Life Safety solutions tie everything together, giving safety personnel and first responders the tools they need to manage emergency events quickly and intuitively.
- NOTIFIER's beyond-the-code solutions are designed to add value by helping you stay ahead of the curve.
- As your operations change, as risks evolve and as new life safety technologies emerge, having the right solution in place can allow you to adapt more quickly and more effectively.

Honeywell Confidential. For internal use only.

The Opportunity

Determining the best NOTIFIER Solution opportunities can come from multiple sources like Project Types, Vertical Markets, Construction Data and Customer Needs. Researching various aspects of the market place will provide a better understanding of what opportunities are in your region to pursue future growth.



Honeywell Confidential. For internal use only.

Segmentation and Sales Drivers



A segment is a grouping of customers with common needs. Segmentation is an important step in the sales process, because it can help you determine which solutions are appropriate for each customer based on the value they will realize from the technology you are proposing. As you will see in the segmentation charts on the following pages, this way of grouping customers by project types and needs can produce different insights rather than focusing only on vertical markets and/or facilities types.

As you review each segment, be aware that understanding risk from the end user's perspective can help you to optimize the customer relationship and position your NOTIFIER solution in ways that speak directly to the business drivers that are likely to motivate a buy decision.

Protecting people, property, assets, revenue streams and brand integrity are high priorities for most customers. Additionally, some customers may look to you to help them:

- Increase occupant satisfaction
- Improve profitability by managing risk
- Reduce insurance and litigation costs
- Gain competitive advantages
- Provide world-class service and support
- Comply with regulatory requirements

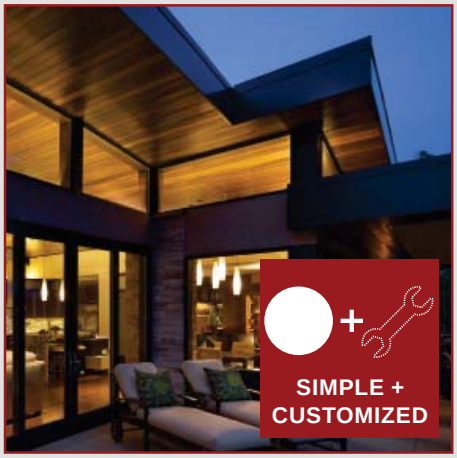
Honeywell Confidential. For internal use only.

Segmentation and Sales Drivers



Simple Standard

Projects that require a simple, competitively priced fire protection system. These projects are typically end user driven and do not involve a specifying engineer.



Specialized Space

Projects that require a simple fire protection system where the client is willing to pay for highly customized appearance, features, or function in order to fit their needs.



Independent Enterprises

Projects that require a sophistocated, competitively priced fire protection system that is engineer specified, but does not need to meet a corporate or district wide standard.



Tuneable Template

Projects that require a sophistocated, competitively priced fire protection system that is engineer specified, and needs to meet a corporate or district wide standard.



Complex Campus

Projects that require a sophistocated, highly capable fire protection system to protect large, complex buildings or multibuilding campuses.

Honeywell Confidential. For internal use only.

Segmentation and Sales Drivers



Simple Standard

Projects that require a simple, competitively priced fire protection system. These projects are typically end user driven and do not involve a specifying engineer.

Examples:
Chain Stores
Gas Stations
Strip Malls

Attributes:
Approachable, Intuitive, Simple

Needs:
Plug and Play
Ease of Installation and Service
Easily integrates with Security System

KEY STAKEHOLDERS

- Property Manager
- Tenant
- Security Dealer or ESD

Honeywell Confidential. For internal use only.

Segmentation and Sales Drivers



Specialized Space

Projects that require a simple fire protection system where the client is willing to pay for highly customized appearance, features, or function in order to fit their needs.

Examples:
Landmark Buildings
High-end Residential
Museums
Entertainment Venues

Attributes:
Tailored, Purposeful, Celebrate Space

Needs:
Specialized Pre-sales/Consulting Support
Product Itself Builds Awareness
Customized Appearance/Function

KEY STAKEHOLDERS

- **Building Owner**
- **Architect and/or Engineer**
- **Security Dealer or ESD**

Honeywell Confidential. For internal use only.

Segmentation and Sales Drivers



Independent Enterprise

Projects that require a sophisticated, competitively priced fire protection system that is engineer specified, but does not need to meet a corporate or district-wide standard.

Examples:
Standalone Hospitals
Medium-sized Office Buildings
Shopping Malls
Manufacturing and Distribution

Attributes:
Capable, Dynamic, Reputable

Needs:
Strong Pre-sale Support
Grow/Change as Building Changes
Application-specific Solutions

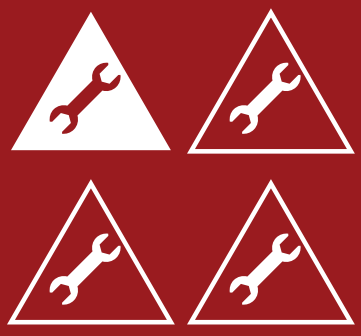
KEY STAKEHOLDERS

- Building Owner/ Property Manager
- Tenant (in some cases)
- Engineer
- Security Dealer or ESD

Honeywell Confidential. For internal use only.

Segmentation and Sales Drivers





Tuneable Template

Projects that require a sophisticated, competitively priced fire protection system that is engineer specified and needs to meet a corporate or district-wide standard.

Examples:
National Chains (hotel, retail, restaurant)
Public Schools

Attributes:
Cutthroat, Economy of Scale, Corporate Credibility

Needs:
Design Support; Simple to Specify
Easy Service and Maintenance
Stabdardized, Scalable System Architecture

KEY STAKEHOLDERS

- **Corporate/ District Specifier**
- **Engineer**
- **ESD**

Honeywell Confidential. For internal use only.

Segmentation and Sales Drivers



Complex Campus

Projects that require a sophisticated, highly capable fire protection system to protect large, complex buildings or multibuilding campuses.

Examples:
Corporate Campuses
College Campuses
Mixed Use High-rises

Attributes:
Connected, Versatile, Expandable

Needs:
Integrated into BMS
Easily Upgradable
Automated Service and Maintenance
Proven Track Record

KEY STAKEHOLDERS

- Property Systems Manager
- Engineer
- ESD

Honeywell Confidential. For internal use only.

Segmentation and Sales Drivers

Best Opportunities

The expected 2015 and 2016 construction dollars may vary based upon your geographical location, but looking at the overall US market will provide a good indication of where are the best opportunities to look for future growth within your region.



	Construction Dollars			Year Over Year Growth	
Category	2014	2015	2016	2015	2016
Medical	$19,374,928,700	$25,084,856,743	$27,517,346,615	29.5%	9.7%
Retail	$29,303,015,698	$35,627,436,003	$37,881,891,002	21.6%	6.3%
Commercial	$24,171,473,606	$26,923,903,909	$28,601,672,395	11.4%	6.2%
Government	$14,810,564,512	$16,452,290,892	$16,990,439,298	11.1%	3.3%
Industrial*	$18,631,317,737	$19,265,953,991	$20,395,207,599	3.4%	5.9%
Educational	$53,962,410,525	$54,140,386,487	$56,242,537,604	0.3%	3.9%
Community**	$15,730,313,207	$15,675,167,908	$16,230,543,277	-0.4%	3.5%
Military	$8,340,468,999	$5,452,198,909	$5,882,776,299	-34.6%	7.9%

Research from Reed Construction Data

* Industrial = Industrial Labs/Manufacturing/Warehouses

** Community = Amusement Parks/Librarires/Reglious bldgs/Sports & ConventionCenters

Honeywell Confidential. For internal use only.

Good/Better/Best Walk

In this section, we show the progressive benefits of a NOTIFIER total life safety solution, from basic fire alarm control panels with horns and strobes up through distributed recipient mass notification and outdoor voice.

Levels	Solutions	Benefits
Good	Horn/Strobes	Meets code requirements
	Fire Alarm Control Panels (FACPs) – Standalone or Networked	Meets code requirements
Better	Digital Voice Command (DVC) Speaker/Strobe	Delivers faster, more accurate instructions in emergencies by enabling authorized personnel to distribute live or pre-recorded voice messages Allows users to target specific areas or address an entire campus
	Advanced Detection	Provides early warning when seconds count Reduces nuisance alarms and downtime Enhances occupant satisfaction, minimizes costly and/or dangerous evacuations and prevents unnecessary shutdowns of critical activities Protects harsh and challenging environments where traditional detection falls short
	Intelligent FAAST Aspirating Smoke Detectors	Distinguishes true hazards from other environmental particulates with the smartest, most sensitive technology available Can warn users of incipient smoke before a fire breaks out
	BACnet	Saves time and reduces human error in emergency situations by linking the FACP network to other building automation and environmental control systems
	Modbus	Offers superior integration and control by connecting the FACP network with other industrial control and automation systems Can be used for mining, solar charging stations, water districts and other industrial applications

Honeywell Confidential. For internal use only.

Good/Better/Best Walk

Levels	Solutions	Benefits
BEST	ONYXWorks	Faster response times Cost-effective, streamlined monitoring Single, graphical point-of-control for fire alarm and security systems Manage a single building or multiple sites around the world
	FirstVision	Enables firefighters and other personnel to respond more quickly and more effectively in an emergency Initial assessment can be performed in 30-60 seconds with no prior training Answers key questions about the nature and progress of the event, building/campus layout and any special hazards
	LED Signs	Provides clear direction where large numbers of people assemble; high ambient noise levels may interfere with voice messages or occupants may be hearing impaired Adds value with non-emergency messaging functionality
HOME RUN	Distributed Recipient Mass Notification System (DRMNS)	Ensures everyone is notified in an emergency by leveraging communications technologies occupants already use, including email, text and social media Adds value by enabling mass distribution of non-emergency communications
	Outdoor Voice	Protects occupants and visitors who are arriving, leaving, working outdoors or moving between buildings Delivers intelligible voice messages outdoors using high-powered speaker arrays (HPSAs)
	Gas Detection	Prevents illness and injuries due to buildup or leaks of CO2 and other hazardous gases Designed for a wide range of applications, including parking garages and sleeping areas

Honeywell Confidential. For internal use only.

The Sales Process

1. Inquiry

Assess the customer's needs and generate interest in NOTIFIER as a solutions-provider.

2. Sales

Develop and present solutions based on what you learned about the customer's needs during the inquiry phase.

3. Technical

Help the customer's technical personnel understand how the system components work togeth-er to deliver value.

4. Revisit, Revisit, Revisit

Customers' interest and available funding for networked solutions often evolves over time. Be persistent.

It is not uncommon for end users to resist networking and integration solutions initially. If they are accustomed to thinking about life safety in terms of just “meeting the code,” they may balk at perceived increases in system complexity and cost. Patience and persistence are important in overcoming hesitation and helping customers to understand the value NOTIFIER’s network solutions can provide—now and in the future.

Through our industry experience and partnerships with ESDs like you, we have identified four phases that most winning sales efforts have in common.

In this section of the Playbook, we offer nuts-and-bolts advice about each of these phases. Some of you, who have years of successful sales experience, may already be using some of these strategies. Nonetheless, we believe everyone will find something useful in the following pages.

Honeywell Confidential. For internal use only.

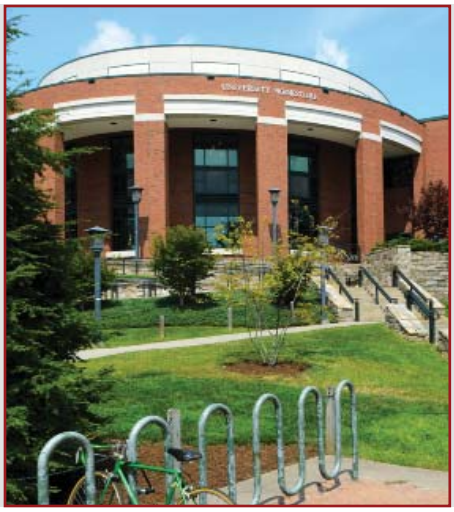
The Sales Process

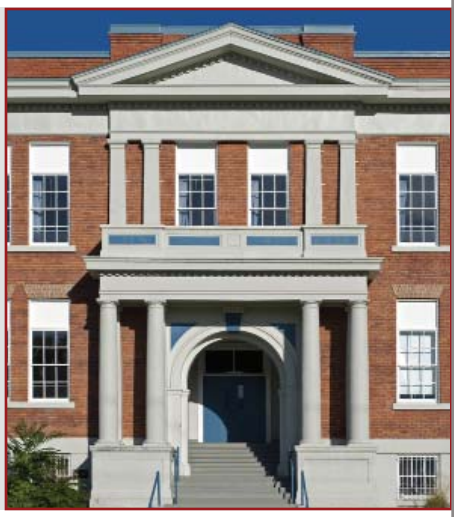
Inquiry Phase – Best Opportunities

Move from a passive to an interactive fire alarm system. Typically in the past fire alarm systems waited to RESPOND ONLY to a fire and evacuate the building and now we need to take control of the emergency and determine the best action based upon the situation. i.e. human created emergency (active shooter, terrorist threat, etc.), natural disaster.

K-12:
Monitoring and controlling entire school district from one location. Student safety.

University/College:
Monitoring and control of a large land area with many building students, staff and visitor safety. Parents want assurance that their children are in a safe environment.





Corporate Campus:
Large land areas with almost no new construction, but the purchasing of existing building surrounding the campus and incorporating them into the existing infrastructure.

Government/Military:
Largest owner of commercial real estate properties and the need for ECS/MNS.





Honeywell Confidential. For internal use only.

The Sales Process

Inquiry Phase – Research

NOTIFIER offers network solutions that can be tailored to meet the needs of any customer. Conducting research before you meet with the customer can give you insights about their facilities, organizational goals and motivators. It can also enable you to ask the right questions during your initial meeting.

Review the customer's relationship with your company.
• Are they an existing customer?

• How long have they been a customer? What other services do you provide to them?

• Do they represent a new opportunity for your company and NOTIFIER?



If the prospect is an existing customer, consider the following questions:

• Is the existing system addressable or conventional?

• Is it a good candidate for retrofit, upgrade or expansion?

• Does it include adequate protection for special hazards, including:
  - Flame Detection
  - Very Early Warning (aspiration or laser)
  - CO/Smoke (sleeping areas)
  - Multi-Criteria Detection (nuisance alarm issues)

• Have they updated the Emergency Response plan?

• Have they re-evaluated the Risk Assessment?

• What are your long term plans for Emergency Communications Systems?

Honeywell Confidential. For internal use only.

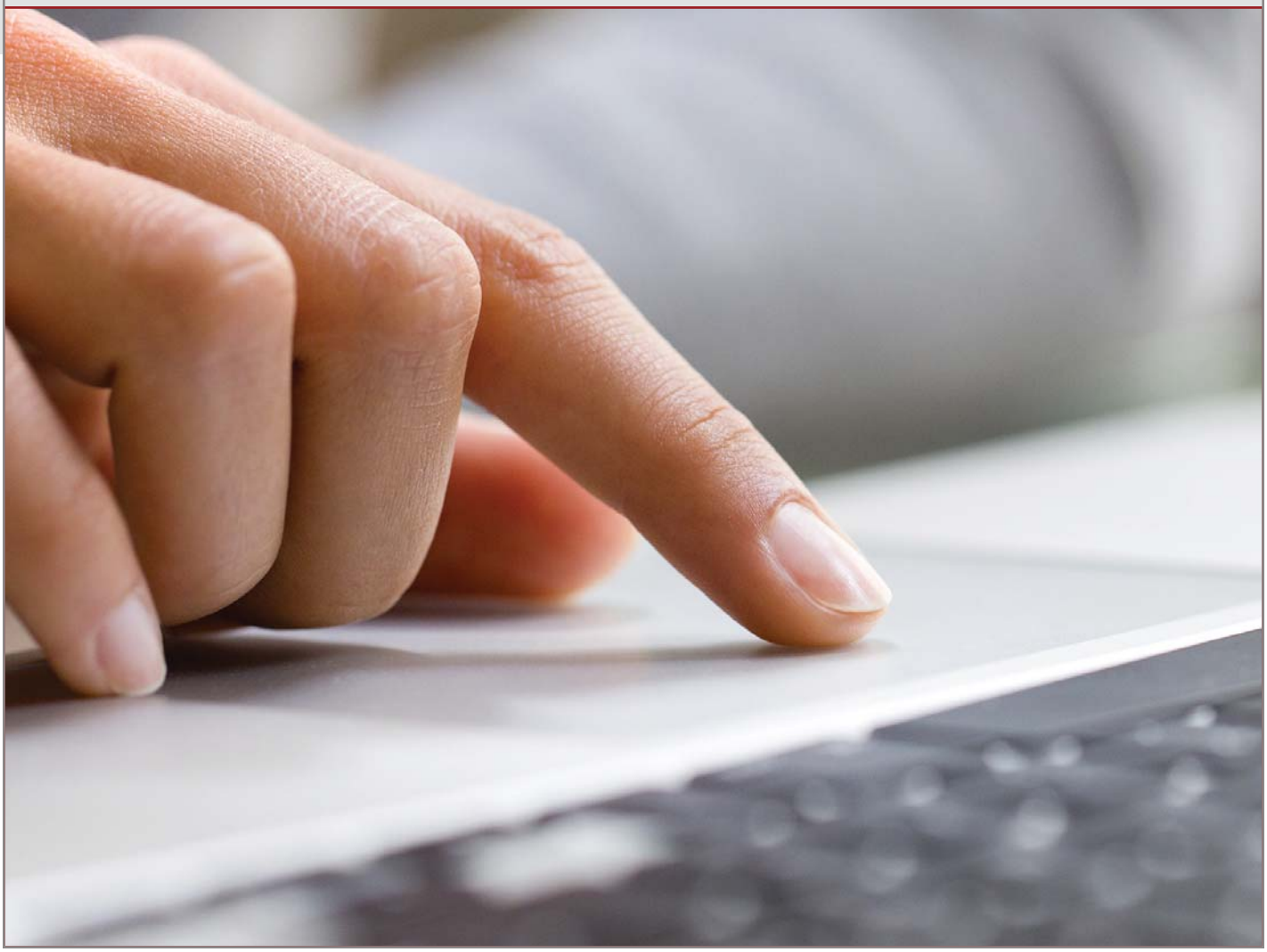
The Sales Process

Inquiry Phase – Research

Review the customer's website to identify specific opportunities, including:

- Existing ECS capabilities and prospective needs (many colleges and universities make this information publically available)

- Additional life safety needs that may stem from:
  - A recent fire or other emergency at the site
  - Labor, regulatory or internal/corporate requirements
  - Changes in the customer's operations and/or in the way specific facilities are used



Honeywell Confidential. For internal use only.

The Sales Process

Inquiry Phase – Key Influencers

Selling networking and integration often requires investigation to understand all of the key influencers before you can gain their interest. Here are some of the players you may want to contact during the inquiry phase.



- **Architect**
- **Engineer Consultant**
  - Electrical
  - Mechanical
- **Specialty Consultant**
  - FPE Firm
- **Design Build Firm**
  - At Risk Firm
- **Project Management Firm**
  - Handles billing
- **General Contractor**
  - Provides vertical market expertise
- **Electrical Contractor**
  - Client approved
- **Specialty Contractor**
- **Insurance Broker**
  - Important relationship with end user
- **Insurance Company**
- **End User**
  - Risk Manager
  - Real Estate Group
  - Construction Group
  - Building Services
- **Property Real Estate Management Firm**
- **Franchise Hotel Management Firm**
- **Authority Having Jurisdiction (AHJ)**

The one-to-one relationships you build with decision-makers and your success at associating yourself with the highest principles of life safety and asset protection often make the most difference in a sales environment. There is simply no replacement for trust, confidence and integrity.

Honeywell Confidential. For internal use only.

NOTIFIER by Honeywell

The Sales Process



Inquiry Phase – ESD Visit

During your initial visit with the customer, your goal is to gain the end user's interest in NOTIFIER as a brand and solution-provider.

Asking the right questions now and listening carefully to the customer's answers will help you to understand their primary and secondary life safety needs from their perspective. When it's time to develop and propose solutions, you'll be better equipped to make your offerings relevant and attractive by presenting each product, system or suggestion in terms of its benefits to the end user.

This meeting is also an opportunity to inspire confidence that you and your company are sincerely dedicated to your customers' long-term interests in everything you do.

It is important to remember that this is NOT a sale day. Keep things simple. You can provide generic information about NOTIFIER's capabilities, but don't overwhelm the customer with specific product offerings or technical information. Save those discussions for the Sales and Technical phases.

Honeywell Confidential. For internal use only.

The Sales Process

Inquiry Phase – ESD Visit

Questions to Ask

• What are your goals and expectations—for the current year, next year and the next five years?

• Are there specific problems or potential challenges that you hope to address?

• Have there been any emergency events recently?

• Do you have an emergency response plan? If so, who owns it? (Ask if whether you can obtain a copy.)

• Who are your key decision makers and influencers?

• If your research prompted other questions, this is the time to ask those as well.

Often the redundancy of a peer-to-peer FACP network, the ability to add ECS or integration with other building and industrial control systems could make a crucial difference in saving lives and assets. But if the customer is not directly aware of a need or potential risk, they may not verbalize it. Ask for access to existing buildings or building plans to supplement the information gathered during your conversation.



Honeywell Confidential. For internal use only.

The Sales Process

Inquiry Phase - Opportunity Checklist

Customer Profile	
Customer Name	
Location (City, State)	
# of buildings/approx. sq. footage/floors	
Number of employees	
Type of business	
Current system (networked, non-networked, voice, etc.)	
Any competitive product? If so, describe	
Are they an existing customer or new prospect? If a current customer, how long?	
What is their parent company?	
Does NOTIFIER have a relationship with the customer on a higher level?	
Key Contacts (Name, Role)	
Facilities	
IT	
Safety Manager	
Site Leader	
Other	

Honeywell Confidential. For internal use only.

The Sales Process

Inquiry Phase - Opportunity Checklist

Customer Profile	
Any plan to upgrade the fire alarm system in the next 12 months?	
What are their goals and expectations—this year, next year, within the next 5 years?	
Any stated customer needs? Did they specifically request information on a particular product/solution?	
Have you thought of other technologies that can be integrated with fire? Releasing, Gas/Flame Detection, Aspirating, Wireless, Emergency Communication or other?	
Have you experienced problems in the past with any difficult detection applications? CO, Steam, Smoke (popcorn, toasters, etc.), Hard to Reach, Early Warning, Harsh or Dirty Environments or other?	
What are the inherent risks in the building?	
Do they have an emergency response plan? Attempt to get a copy before the session	
Who owns the emergency response plan—or who gets the first phone call when there's an emergency in the building?	
Were there any recent emergency events?	
Perceived needs based on your knowledge of the customer	
Offering and benefits to the customer	

Honeywell Confidential. For internal use only.

The Sales Process



Sales Phase – Developing Solutions

Each of your potential customers will present a unique set of life safety needs, priorities, technical challenges and opportunities. The Case Studies in the Reference section of this Playbook include applications as diverse as:

- A large school district spread across a broad geographic area with an existing fiber optic communication network.
- An aqueduct project with 15 pumping stations that deliver 1.6 million acre-feet of water each year to cities, farms and Native American tribes.
- A luxury hotel complex with six restaurants, a major Broadway theater, an underground parking garage, guest rooms and the largest enclosed atrium in the United States—all in a 53-floor building in the heart of New York City's Times Square.
- An independent, liberal arts college with a 15-year plan to upgrade aging fire systems in all of its residential, academic and administrative facilities.

Understanding the end user's needs and presenting solutions that offer real value—that's how NOTIFIER and our ESDs have earned the investments and trust of our customers for decades.

Honeywell Confidential. For internal use only.

The Sales Process

Sales Phase – Developing Solutions

Once you've inquired with key influencers, conducted your research and visited the end user, you should be well-prepared to design a solution-based offering. Here are a few tips to keep in mind.

- Building the right network from the start provides a solid foundation for the future. Review the Network Comparison on the next page to determine which solution is right for your customer.
- Consider the monitoring, advanced detection, ECS and other solutions outlined in the Good/Better/Best Walk on pages 21-22 of the Playbook. Based on your understanding of the customer's risks and priorities, which of these solutions will add value to your offering?
- You may also want to provide multiple solutions or phased implementation options that addresses the customer's short-, mid- and long-term needs, budgets and schedules as you understand them.
- Include ballpark pricing for each solution and alternative you present.
- Contact your RSM for registering large projects for competitive bid situations – leveraging better pricing.



Honeywell Confidential. For internal use only.

The Sales Process

Sales Phase – Preparing Your Presentation

ESD/RSM Visit

Based on the solutions you intend to pitch, identify the resources you will need to support an effective presentation. These may include:

- Case studies from similar customer types
- Capabilities based on the information in this guide, as well as NOTIFIER's ECS and Advanced Detection Playbooks
- Products that offer the most value given the size and type of the customer's operations (including the number, size and usage of buildings; acreage; number of occupants; occupancy types; etc.)
- PowerPoint presentations
- Home office product support (on-site or in preparation for the meeting)
- Relevant collateral to use as leave-behinds (data sheets, specifications, proposals)
- Support from third-party vendors (including personnel, specifications, collateral, etc.)
- Offer your customers the opportunity to visit the Customer Experience Center in Connecticut to meet with Senior Management, Sales, Marketing, Engineering, Quality and a factory tour.



Honeywell Confidential. For internal use only.

The Sales Process

Sales Phase – Preparing Your Presentation

Honeywell Fire Systems Group (FSG) Services

As you are preparing for your presentation, remember that Honeywell Fire Systems Group (FSG) Services can help. We are a full-service company that provides application, technical, marketing and financial services to NOTIFIER's Engineered Systems Distributors. FSG Services has expertise in designing & laying out comprehensive life safety systems including products from NOTIFIER and its partners.

Overall FSG supports NOTIFIER's ESDs with a broad range of services, including:

- Computer Aided Design (CAD)
- Technical review of a project
- Applications, design, and layout
- On-Site technical assistance (survey and evaluation)
- System programming
- Comprehensive training
- Project management
- Preparation and distribution of submittal packages

FSG Services provides versatility to assist ESDs during peak demand periods. FSG Services is an ISO 9001:2008 Certified Company with NICET certified staff. HFSG Services is ready and able to support you. Contact them via their website for additional information:

http://www.honeywellfsgservices.com/contact.html



Honeywell Confidential. For internal use only.

The Sales Process

Sales Phase – Preparing Your Presentation



Agenda

Before the presentation, you should prepare and send a formal agenda document so your audience knows how long the presentation will be and which topics will be covered. Make sure you add an item that specifically addresses the customer's primary and secondary life safety needs as you understand them. Also remember to provide opportunities for feedback and modification. Every presentation needs to match your specific audience and sales conditions, but your agenda might look something like the example on the next page.

Honeywell Confidential. For internal use only.

The Sales Process

Sales Phase – Presentation Day

Customer Logo

NOTIFIER Life Safety Solutions
Sample Presentation Agenda
Date, Location, Time

Your ESD Logo

- Introductions and time check
- Goals for the meeting (including a check-in with the audience about their goals)
- Brief history of your engagement with the customer
- Distributor & NOTIFIER qualifications (capabilities, similar projects, etc.)
- Review of customer's primary and secondary life safety needs
- High-altitude presentation of solution
  - Main components and how they address the primary and secondary needs of the customer (no detailed costs or part numbers yet)
  - Keep it focused on benefits and major features that the audience will understand
  - Refer your audience to the proposal that you have distributed or that you will send after the meeting
  - Ask for questions and address any perceived hesitations or objections
  - Draw them out if you sense they aren't being voiced
- Q&A
- Closing & Next Steps
- Review any action items and/or open issues requiring follow-up
- Determine next steps. With whom will you follow up? What is the timeline for doing so?
- Establish primary points-of-contact with the ESD and end user.

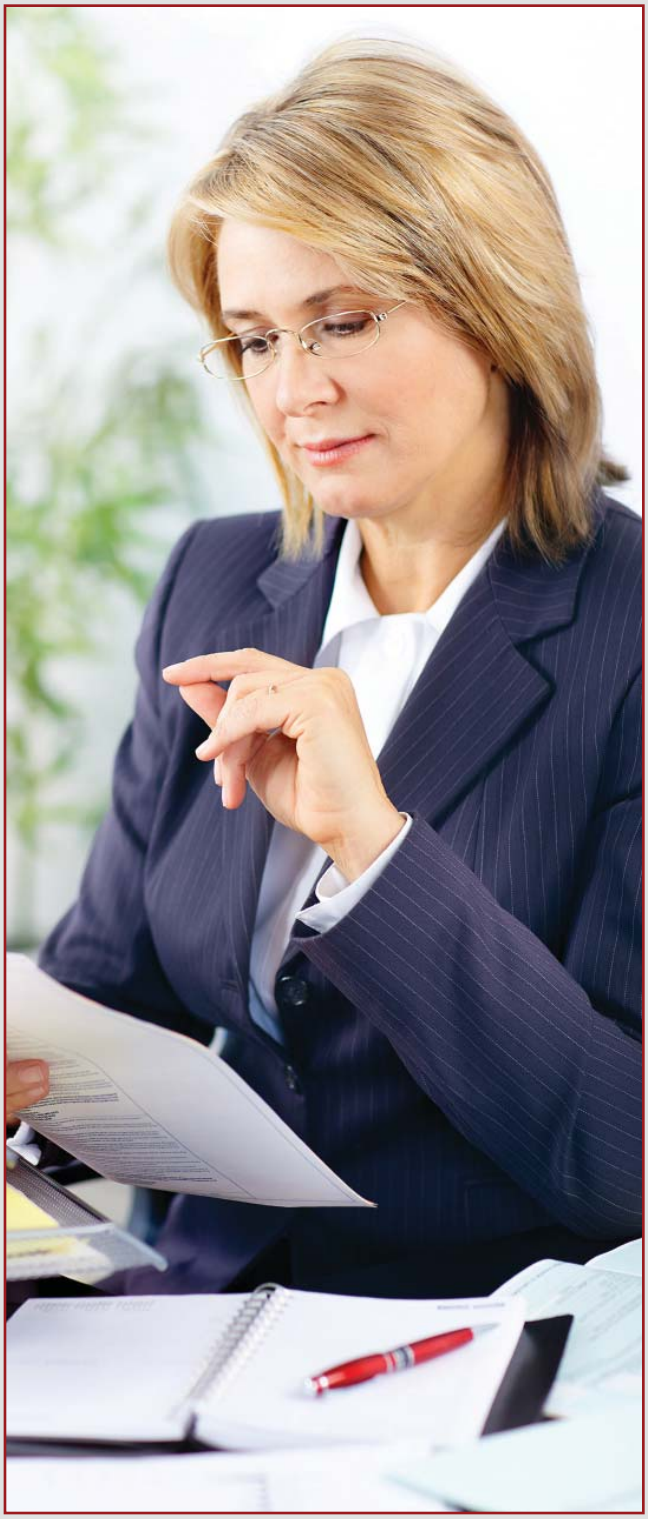
Honeywell Confidential. For internal use only.

The Sales Process

Sales Phase – Presentation Day

Additional Presentation Components & Strategies

- If time permits, discuss the NOTIFIER experience and legacy. Offer references.
- Discuss your installation process and duration, as well as NOTIFIER's Support and R&D efforts, which keep the most current and cost-effective technology available to the end user at all times.
- Ask what their decision-making process will be and who will be involved. Let the customer know you and NOTIFIER are available for another meeting and/or downstream questions.
- Leave printed materials (collateral, hard-copy proposals, etc.) and direct them to follow up demos, marketing resources and other technical information online.
- Before concluding:
  - Provide accountability for closure. If there are any open issues or questions identified during the presentation, specify who will provide the information and when it will be sent.
  - Ask the customer to identify one point of contact to be the primary interface for follow-ups. Provide a single point of contact at the ESD to manage next steps. It helps to demonstrate ownership.
- Ask for final questions and thank your audience for their time.



Honeywell Confidential. For internal use only.

The Sales Process

Sales Phase – Preparing & Delivering a Proposal

As an experienced distributor, you will have your own style and template for your proposals. We offer the following tips to help you optimize your approach:



Selling Benefits by Way of Features

Make sure you are selling the benefits of the system you propose—not just technical features. This will be especially important for competitive reasons, to ensure your customer is comparing “apples to apples.” As an example, when proposing the ONYXWorks workstation, explain the value of centralized monitoring and control for the specific application, whether it’s the ability to link the fire alarm and security systems within a single building, to provide a single point-of-control across multiple sites or any other benefit your customer will realize from the solution.



Educating Customers

Networked systems are more complex than conventional fire alarm systems, especially if they include integration with other life safety, building automation or industrial control systems. Since some of these technologies may be unfamiliar to your customer, you might include a basic explanation of the specific technologies you are proposing and discuss how all the system components will work together.

Honeywell Confidential. For internal use only.

The Sales Process

Sales Phase – Preparing & Delivering a Proposal

Targeting Audiences Effectively

Your proposal should strike a delicate balance between providing enough useful detail and overwhelming audiences with too much technical information. It can often be effective to prepare two or three separate sections of a proposal with varying degrees of technical detail—one level for executives who only want the high-level overview, one level for facility managers and perhaps a third, more detailed section for technical consultants, engineers or other specialists who will want to see it. Make sure you have staff available to speak to each audience at the appropriate level if questions arise.



Equipment, Installation, Maintenance & Support

Be very clear about what the proposal does and does not include—from an equipment perspective as well as a service and support perspective. Consider carefully whether your budget includes complete installation, as well as downstream maintenance details and costs.



Honeywell Confidential. For internal use only.

The Sales Process

Sales Phase

Responding to Customer Objections & Competitive Comparisons

As you address questions and objections, focus on big-picture safety concepts and the full costs of a disaster or crisis at the customer's facility, which help to justify the investment in a 'beyond-the-code' solution. Emphasize the competitive advantages of NOTIFIER—like long-term support, reliability, service, engineering experience and the true cost of ownership over time.



Honeywell Confidential. For internal use only.

The Sales Process



Sales Phase

A Great Tool for Both New and Experienced Distributor Sales Staff!

The Solution Explorer app walks you and your customers through a tour of NOTIFIER products and develops customized solutions based on your clients' needs.

- Walk a potential customer through a system during a sales meeting to develop real-time custom NOTIFIER recommended solutions.
- Build and prepare suggested NOTIFIER solutions based on user needs before calling or meeting with new, existing, or prospective customers.
- Easily gather information and data sheets related to recommended NOTIFIER solutions.
- Quickly build a professional customized web page of proposed NOTIFIER solutions to present and email directly to prospective customers.
- Use as a learning tool to learn more about NOTIFIER systems.

Now Available for iPad in the Apple Store! Search for "NOTIFIER Solution Explorer"

Honeywell Confidential. For internal use only.

The Sales Process



Sales Phase

Following Up

Assess the extent to which your follow-up should be educational or competitive in tone based on your contact's familiarity with network and integration technologies.

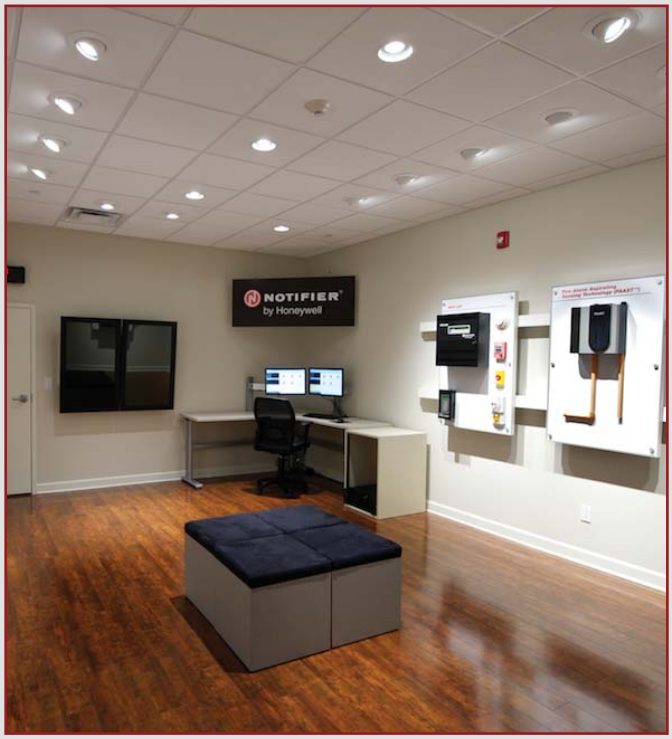
Your overarching goal is to instill confidence in the prospect that you personally, and your company as a whole, represent the best choice for the customer. That becomes your competitive advantage. In most cases, the best way to do that is to evoke self-assurance, knowledge, experience and the sense that you are driven by your customer's long-term interests in everything you do.

You can demonstrate your own technical competence and mastery to a wide range of audiences by citing other network installations you've completed and by talking about NOTIFIER's impressive legacy. Offer references if you can, and explain how your solutions integrated business functions, operational sustainability and continuity for these customers.

Honeywell Confidential. For internal use only.

The Sales Process





Sales Phase

Customer Experience Center

Come visit the NEW full-scale Customer Experience Center in Northford, Connecticut. From Product Management to Engineering, Testing Labs to Manufacturing and Technical Support – nothing is off limits. We can line up the right NOTIFIER and Honeywell personnel to support your customer's needs and meeting objectives. And the hub of your meeting can take place around the 15ft mahogany conference table in NOTIFIER's state-of-the-art Customer Experience Center, which comes complete with functional products, a smart board, multiple TV monitors, customizable graphics, and more.

Honeywell Confidential. For internal use only.

The Sales Process



Technical Phase

Once the customer has had an opportunity to review your presentation and proposal, they may require technical assistance to better understand how all the system components and implementation phases will work together.

NOTIFIER Product Managers and Honeywell FSG Services can partner with you to conduct site visits or end-user webinars for the customer's Facility Manager, Department Chief, Security personnel, Insurance Compliance Officer, IT staff—anyone in a position to influence the customer's decision-making.

During this phase of the sales process, our goal is to give the potential customer the peace of mind they need to say YES.

Honeywell Confidential. For internal use only.

The Sales Process

Phase 4: Revisit, Revisit, Revisit

As we mentioned earlier, persistence is crucial when selling network and integration solutions. Many organizations have one to five-year budget plans, and resources become available over time. Planning a staged progression can help make it easier for the customer to invest in a beyond-the-code solution that offers superior performance.

Even if the customer is not ready to upgrade today, their interest may change in the future. It's worth your time and effort to revisit the issue, because growth on an existing network platform can generate recurring revenue for your business. Recurring revenue can be generated by expanding the network capabilities of adding more Emergency Communication Systems, ONYXWorks add-on applications like Email Notification and Voice Over IP, network Integration to third party software interfaces and future product enhancements.



Honeywell Confidential. For internal use only.

Phase 4: Revisit, Revisit, Revisit



Customer Feedback

Whether you win the project or not, it's also useful to request feedback from your customer or end user. Ask what worked and what you can improve upon in your presentation, your research, your proposal and your overall sales execution. If you ask politely and honestly, many people will give you useful insights for your next opportunity. In some cases, you may need to "read between the lines" to determine what the key dynamics were—both for winning and for losing a project. Remember, keeping your engagement top-shelf and professional from end-to-end may earn you more business from this customer—whether you won this specific project or not.

Honeywell Confidential. For internal use only.

Product and Service Solutions

The PI-2 Brochure, titled “A World of Solutions – Life Safety and Emergency Communications Systems Information Guide” is an excellent source of information, but will serve its best function as a guide for talking points than just as a “Leave Behind.” In the “Product and Service Solution” section of this playbook we will discuss the various NOTIFIER Solutions and highlight the benefits of the products.

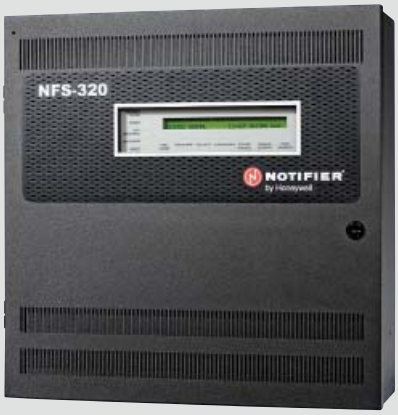


An electronic copy of the PI-2 can be found here:

http://www.notifier.com

Honeywell Confidential. For internal use only.

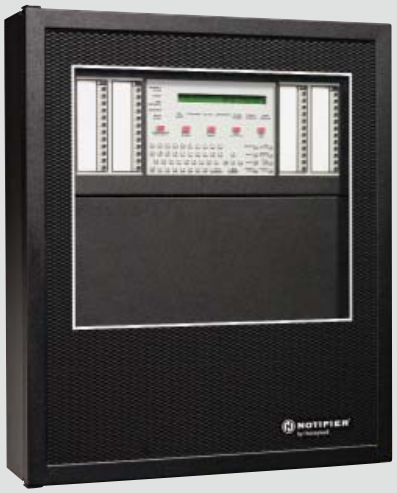
Product and Service Solutions



NFS-320

The NFS-320 is engineered for small applications, incorporating features that minimize installation time, enable faster response times, and simplify maintenance and usability. The NFS-320 offers all the sophistication and premier performance of the ONYX® Series.

- One Signaling Line Circuit (SLC) with 318 devices (159 detectors and 159 modules)
- Networkable with NOTI-FIRE-NET and High Speed NOTI-FIRE-NET™ networks
- 80 Character Display
- Supports Digital Audio (DVC)when connected to NOTI-FIRE-NET™ or High Speed NOTI-FIRE-NET™
- Listings: Releasing, Mass Notification, Seismic Certified and Marine Approved



NFS2-640

The NFS2-640's modular design maximizes flexibility and allows customization to your specific life safety needs. Should these needs change in the future, the NFS2-640 can adapt with the addition of system modules.

- One Signaling Line Circuit (SLC), expandable to two, with 636 devices (159 detectors and 159 modules per SLC)
- Networkable with NOTI-FIRE-NET™ and High Speed NOTI-FIRE-NET™ networks
- 80 character, 640 character or displayless (network node) operator interface options
- Supports direct integration with the Digital Audio (DVC)
- Listings: Releasing, Mass Notification, Seismic Certified and Marine Approved

Honeywell Confidential. For internal use only.

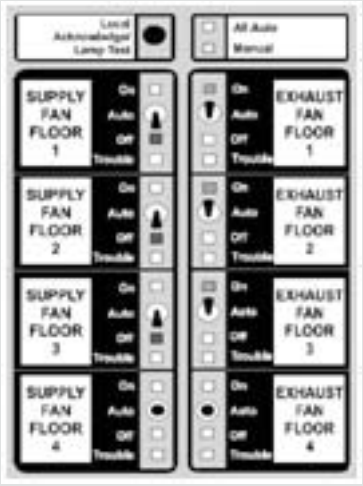
Product and Service Solutions



NFS2-3030

The NFS2-3030, with its impressive point capacity and powerful programming options, is the complete solution for large applications requiring superior performance.

- Up to 10 Signaling Line Circuit (SLC) with 3180 devices (159 detectors and 159 modules per SLC)
- Networkable with NOTI-FIRE-NET™ and High Speed NOTI-FIRE-NET™ networks
- 640 character or displayless (network node) operator interface options
- Supports direct integration with the Digital Audio (DVC)
- Listings: Releasing, Mass Notification, Seismic Certified and Marine Approved
- FM6320 approved gas detection system



Smoke Control

Smoke Control is an engineered system that uses mechanical fans to produce airflows and pressure differences across smoke barriers to limit and direct smoke movement.

- The SCS-8/SCE-8 Annunciator is used to provide control and monitoring of the FACP modules (Relay and Monitor) used for Smoke Control.
- UUKL and NFPA 90A, 92A and 92B
- Two modes of operation: Firefighter's Smoke Control Station (FSCS) and Heating, Ventilation and Air Conditioning (HVAC)

Honeywell Confidential. For internal use only.

Product and Service Solutions

The FireWarden Series

The Fire Warden Series offers all the benefits of an addressable technology for smaller buildings requiring a minimal amount of initiating and notification devices, typically served by conventional panels.



FireWarden-50

- Supports up to 50 addressable devices(any mix of detectors and modules)
- Two Class A or B, independently programmed NAC circuits
- Integrated Digital Alarm Communicator Transmitter (DACT)
- Optional IP or GSM Communicator



FireWarden-100-2

- Supports up to 198 addressable devices(99 detectors and 99 modules)
- Four Class B or Two Class A NAC circuits
- Integrated Digital Alarm Communicator Transmitter (DACT)
- Optional IP or GSM Communicator

Honeywell Confidential. For internal use only.

Product and Service Solutions

Releasing and Conventional Panels and Communicators



SFP Series Conventional Fire Panels

- SFP-5UD 5 Zone Control Communicator
- SFP-10UD 10 Zone Control Communicator
- SFP-2402 2 Zone Control
- SFP-2404 4 Zone Control



RP Series Releasing Panels

- RP-2001 Pre-Action Deluge
- RP-2002 Agent Release



Fire Alarm Communicators

- UDACT2 Universal Digital Alarm Communicator Transmitter (DACT) , Intelligent
- 44 Series Slave DACT
- IPDACT Series IP Fire Alarm Communicator
- IPGSM-4G IP Internet & GSM 4G Communicator

Honeywell Confidential. For internal use only.

Product and Service Solutions

Advanced Detection

A fire system that protects people, property and business continuity in sensitive and challenging environments while maximizing response time, stability and reliability.

Advanced Detection is comprised of two key elements: a set of complex **software algorithms** found in all ONYX Series fire alarm panels and a suite of **advanced, specialty detectors**. When used together, these elements extend Intelligent Sensing capabilities far beyond typical spot-type smoke or gas detection.



For additional information refer to the Advanced Detection Playbook.

Honeywell Confidential. For internal use only.

Product and Service Solutions

Overview of Advanced Detection Products



Acclimate Plus™

Self-optimizing heat and smoke detector that combines thermal and photoelectric technologies into a single device

- Adjusts sensitivity parameters automatically to maximize detection across a broad range of fire types
- Provides a more affordable solution in nuisance prone areas
- Ability to separate a pre-alarm condition from a general evacuation alarm condition



IntelliQuad™ / IntelliQuad Plus™

Intelligent, multi-criteria detector capable of sensing all four major signatures of a fire: smoke, heat, infrared light and carbon monoxide (CO)

- Prevent costly disruptions and operate in areas where traditional detection will not perform correctly
- Saves money through reduced material and labor costs
- IntelliQuad™ Plus adds the ability to send a discreet carbon monoxide alarm

Honeywell Confidential. For internal use only.

Product and Service Solutions

Overview of Advanced Detection Products



VIEW™

High-sensitivity smoke detector that's 100 times more sensitive than standard photoelectric smoke detectors.

- Ideal for critical applications where a trace of undetected smoke is unacceptable or where high air flows make traditional smoke detectors ineffective
- Provides point detection of smoke, allowing personnel to quickly pinpoint an incipient fire's location and limit damage
- Can consider readings from adjacent sensors to provide even faster detection of fires



Reflected Beam Smoke Detectors

Protect open areas with high and sloping ceilings where spot-type smoke detectors are difficult to install and maintain.

- Ideal applications are atriums, cathedral ceilings, aircraft hangars, warehouses, sporting arenas, concert halls and enclosed parking facilities
- Single-ended design simplifies installation
- Remote test feature can be activated remotely via the FACP or a remote test switch

Honeywell Confidential. For internal use only.

Product and Service Solutions

Overview of Advanced Detection Products



FAAST™ XT - 28,800 SQF
FAAST™ - 8,000 SQF
FAAST™ XS - 5,000 SQF

Intelligent FAAST™

Aspirating smoke detector uses a fan and pipe network to draw air into a highly sensitive sensing chamber

- Ideal applications are mission critical areas, harsh environments, temperature extremes, prisons, large open spaces and high airflow areas
- Employs a three stage filtration process to ensure that only smoke raises an alarm
- Connects directly to the NOTIFIER panel, providing seamless communication without the need for added hardware
- Communicates Modbus/TCP protocol for integration into Building Management Systems

Honeywell Confidential. For internal use only.

Product and Service Solutions

Advanced Detection - Good/Better/Best Walk

Applications	Good	Better	Best
Commercial Sleeping Spaces	Acclimate Plus™	IntelliQuad™	IntelliQuad Plus™
MRI Rooms			Intelligent FAAST™
Telecom Switching Rooms	Acclimate Plus™		VIEW™ Intelligent FAAST™
Server Rooms			VIEW™ Intelligent FAAST™
Large Data Centers		VIEW™	Intelligent FAAST™
Large Open Spaces			Intelligent FAAST™ Beam
Theater Smoke		IntelliQuad Plus™	IntelliQuad Intelligent FAAST™
Dirty	Acclimate Plus™		IntelliQuad™ Intelligent FAAST™
Temperature Extremes	Beam		Intelligent FAAST™
Kitchens		Acclimate Plus™	IntelliQuad™
Swimming Pools		Beam Intelligent FAAST™	
Locker Rooms	Acclumate Plus™		IntelliQuad™
Boiler Rooms	Acclimate Plus™	IntelliQuad™	IntelliQuad Plus™
Parking Garages	Beam	IntelliQuad™	Intelligent FAAST™
Laundry Rooms		Acclimate Plus™ IntelliQuad™	IntelliQuad Plus™
Semi-fabs			Intelligent FAAST™ VIEW™
Commercial Livestock Facility		IntelliQuad™ Beam	Intelligent FAAST™
Surgical Suite		Acclimate Plus™	IntelliQuad™

For additional information refer to the Advanced Detection Playbook.

Honeywell Confidential. For internal use only.

NOTIFIER by Honeywell

Wireless Fire Detection

NOTIFIER's SWIFT™ Wireless Integrated Fire Technology – Reliable wireless fire detection fully integrated with ONYX® fire alarm systems.



NOTIFIER's wireless solution interfaces with intelligent fire systems to create a robust mesh network with UL listed Class A communication mesh protocol.

- Fully Integrated FlashScan protocol on same SLC loop with wireless gateway
- Capable of up to 50 devices and multiple gateways
- Reliable wireless mesh Class A communications protocol

Wireless Devices

- Photo
- Acclimate
- Standard Heat
- Rate-of-rise Heat
- Monitor Module
- Relay (4Q2015)

Honeywell Confidential. For internal use only.

Product and Service Solutions

Gas and Flame Detection



Flame Detection

While the use of heat and smoke detection covers many traditional applications, the addition of flame detection offers a higher level of protection in critical, high-risk and high-value installations, such as boiler rooms, paint booths, fuel storage and refueling facilities, gas and oil production facilities or aircraft hangars. NOTIFIER offers a wide range of industry-leading flame detection options, providing solutions for whatever challenges the end user's operations present.



Gas Detection

Hazardous and toxic gases are present in virtually every environment. Anywhere people gather for work or leisure, indoors or out, there is a potential risk of exposure. NOTIFIER's gas detection products can be programmed to recognize different event thresholds based on the concentration level of the gases being monitored. Whether at a school, dormitory, office building, shopping center, swimming pool, manufacturing plant or warehouse, seamlessly integrated gas detection can help end users protect people, comply with legal requirements and prevent costly business disruptions.

Honeywell Confidential. For internal use only.

Product and Service Solutions

What is Networking & Integration?

As a leader in life safety technology, NOTIFIER offers an extensive line of networking and integration products to meet any customer's needs. NOTI-FIRE-NET and High Speed NOTI-FIRE-NET link multiple NOTIFIER FACPs into a single, peer-to-peer network that operates redundantly for enhanced system survivability. With the FACP network in place, additional capabilities can be added, enabling facilities to adapt to changing risks as their operations evolve and grow.

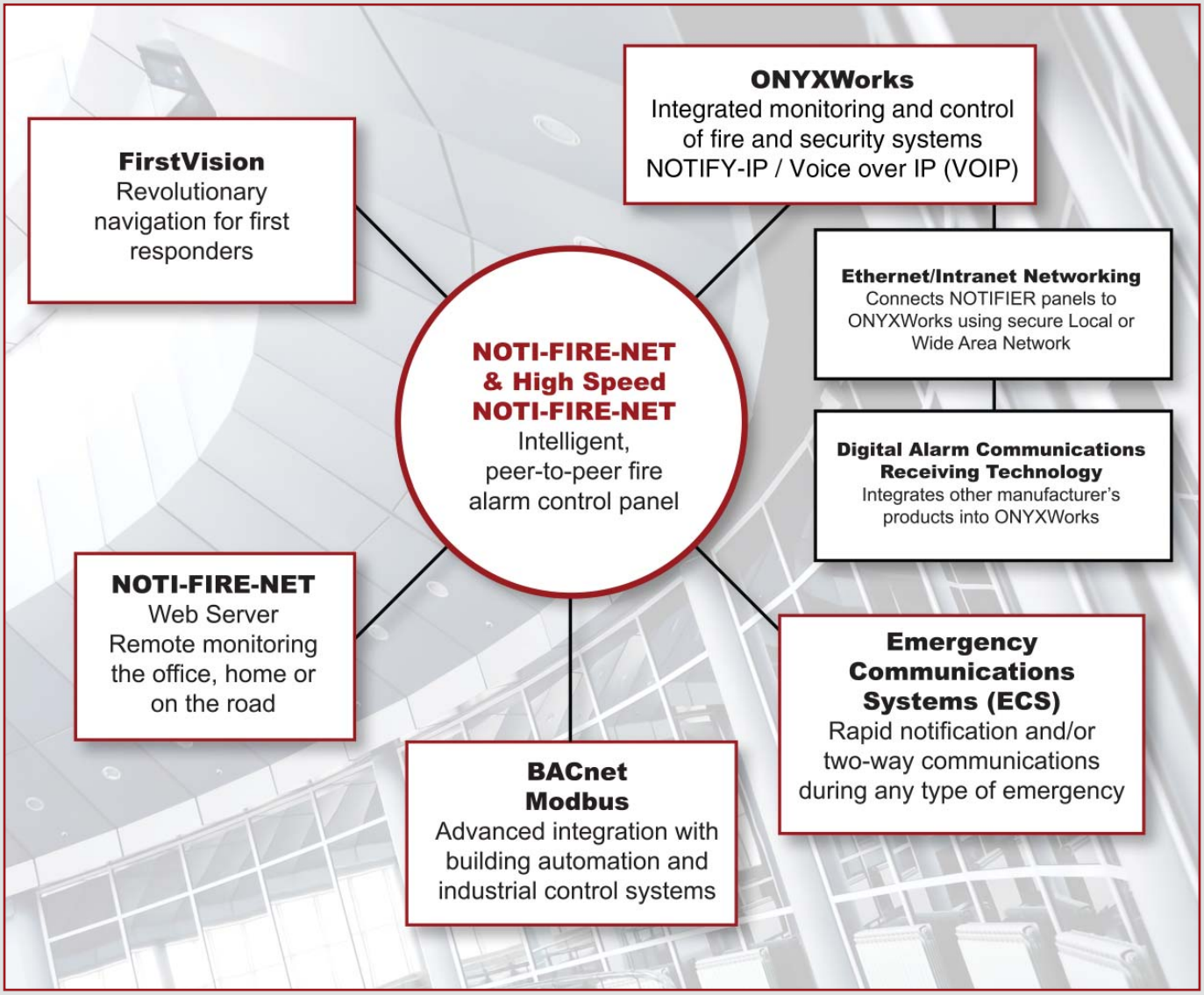
For better responsiveness in emergencies and streamlined management every day, NOTIFIER's graphical workstation offers integrated control of fire and security systems. In the event of a fire, gas leak, severe weather or threat of violence, NOTIFIER's emergency communications systems (ECS) can rapidly distribute vital information to everyone in the target area. Our building automation and industrial control integration products can deliver superior continuity and control while leveraging existing assets such as public address or lighting systems. Finally, the FirstVision navigation tool lets first responders gather a wealth of critical information within minutes of arriving scene.



NOTIFIER's networking and integration solutions are compatible with a wide range of current and legacy products, including other manufacturers' fire and security panels. They can be implemented in phases, allowing customers to build their capabilities as budgets and construction schedules permit. For retrofit projects, NOTIFIER's digital alarm communications technology and Ethernet/Intranet Gateway offer flexible, cost-effective solutions that integrate existing equipment and communications networks.

Honeywell Confidential. For internal use only.

Product and Service Solutions



What is Networking & Integration?

When seconds count, having access to the right information, coordination and control is vital. NOTIFIER's networking and integration solutions offer superior life safety and asset protection by enabling occupants, fire fighters, law enforcement, facility personnel and automation systems to respond more effectively in emergency situations. Whether the customer needs to protect a single building or a global enterprise, NOTIFIER offers flexible, scalable, powerful solutions that can meet end users' current and future needs.

Honeywell Confidential. For internal use only.

Product and Service Solutions



NOTIFIER Networking & Integration

Value Proposition

The next several pages offer marketing and value positioning language you can use in your verbal and written communications with customers, including proposals. Consider your customers' experiences, perspectives and needs as you select and edit the pieces that will be most effective.

NOTI-FIRE-NET & High Speed NOTI-FIRE-NET

A peer-to-peer network of intelligent fire alarm control panels (FACPs) is the backbone of any robust life safety solution. NOTI-FIRE-NET and High Speed NOTI-FIRE-NET deliver enhanced survivability and peace of mind by linking individually programmed NOTIFIER FACPs. The result is a unified, cooperatively controlled network that prevents the loss of any single node from compromising the rest of the system. A key component of an emergency communications system (ECS), NOTI-FIRE-NET also provides the framework for integration with security, building automation and industrial control systems as well as remote monitoring and Emergency Responder navigation tools. NOTI-FIRE-NET/High Speed NOTI-FIRE-NET can accommodate networks of any size, offering backward and forward compatibility with all NOTIFIER intelligent systems.

Honeywell Confidential. For internal use only.

Product and Service Solutions

NOTI-FIRE-NET™ vs. High Speed NOTI-FIRE-NET™ Comparison

Feature	NOTI-FIRE-NET	High Speed NOTI-FIRE-NET
Nodes	103	200
Nodes with DVC Support	54	200
Node Addresses per NCM	1	2
Media	Wire Multi-mode fiber	Wire Multi-mode fiber Single-mode fiber
Communication Speed	312.5Kb (wire) 312.5Kb (fiber)	12Mb (wire) 100Mb (fiber)
Wire		
Maximum Distance	3,000 feet	3,000 feet
Gauge	14-18 AWG	14-18 AWG
Configuration	Point-to-Point & Bus	Point-to-Point
Multi-mode Fiber		
62.5/125µm	8 dB Limit	10 dB Limit
50.0/125µm	4.2 dB Limit	6.5 dB Limit
Wavelength	850nm	1310nm
Connector Style	ST	LC
Single-mode Fiber		
9.0/125µm	Discontinued Converters	30dB Limit
9.0/125µm	ST	LC

Honeywell Confidential. For internal use only.

Product and Service Solutions



Solutions Matrix

New Construction

For new construction projects, High Speed NOTI-FIRE-NET offers the most flexible solution. High Speed NFN supports up to 200 network nodes, with or without digital audio, delivering superior bandwidth, communication speeds and capacity for future growth. Many new constructions are utilizing single-mode fiber for all communications, including fire alarm systems, security, CCTV and card access systems. A High Speed NFN network can support any combination of high-data wire (point-to-point configuration only), multi-mode fiber and single-mode fiber.

Expansion

An existing FACP network can be expanded using either standard or High Speed NOTI-FIRE-NET as long as the design does not exceed the network's node capacity. If both styles are used, their inability to communicate directly can be overcome by adding IP-based NOTI-FIRE-NET gateways and connecting both networks to an OnyxWorks graphical workstation. A single OnyxWorks interface can connect up to 200 IP-based gateways, each with a full complement of standard or High Speed network nodes.

Retrofit & Upgrade

Sometimes replacing the existing network media—including wire, fiber, phone lines or Ethernet cabling—is not feasible or ideal. In these cases, you may need to use the standard-speed
NOTI-FIRE-NET platform to retrofit or upgrade an existing FACP network. This solution supports up to 103 nodes, which is reduced to 54 if the system includes integrated digital audio. NOTI-FIRE-NET supports wire (point-to-point and bus configurations) and multi-mode fiber connections.

Honeywell Confidential. For internal use only.

Product and Service Solutions

NOTIFIER Networking & Integration Value Proposition

ONYXWorks

For faster notification and response in emergency situations, ONYXWorks is an integrated facilities monitoring system that provides a centralized view of fire alarm and security system information. The intuitive, graphical workstation lets safety personnel rapidly pinpoint, investigate, and respond to alarm events with minimal operator training. Versatile enough for single-building, multi-building, multi-site and even worldwide applications, ONYXWorks allows end users to view and manage everything over a proprietary network with secure access. It can serve as a valuable maintenance and diagnostic tool with real-time trouble reporting and history logs that help users identify maintenance patterns. ONYXWorks is an ideal retrofit solution, which can integrate existing NOTIFIER alarm panels as well as those manufactured by our competitors. Finally, ONYXWorks supports IP-based voice paging for mass notification.



Honeywell Confidential. For internal use only.

Product and Service Solutions

NOTIFIER Networking & Integration Value Proposition

Ethernet/Intranet Network Gateway

The NOTI-FIRE-NET Gateway is an intelligent interface that connects NOTI-FIRE-NET and High Speed NOTI-FIRE-NET FACP networks to ONYXWorks. The gateway offers full panel programming and network diagnostics support. It also provides a flexible, cost-effective method for integrating multiple facilities over an existing Local Area Network (LAN) or Wide Area Network (WAN).

The NOTI-FIRE-NET Gateway allows for a single network to be split into multiple networks by adding additional gateways and can also bridge NOTI-FIRE-NET and High Speed NOTI-FIRE-NET networks into one network with ONYXWorks.



Digital Alarm Communications (DACT/DACR)

For retrofit applications, NOTIFIER's Digital Alarm Communicator Receiver Gateway enables integration of non-NOTIFIER fire panels, security panels and remote buildings using standard phone lines and/or IP-based Ethernet. The gateway connects panels equipped with digital alarm communicator transmitters (DACT) to ONYXWorks, combining all panels into a single platform for unified monitoring and control.



Honeywell Confidential. For internal use only.

Product and Service Solutions

NOTIFIER Networking & Integration Value Proposition

Network Control Annunciator (NCA)

The Network Control Annunciator features a 640-character LCD display with QWERTY keypad. Multiple NCAs can be distributed anywhere on the network to provide access to fire alarm system information or network-wide control functions such as Acknowledge, Silence, Reset, Device Enable/Disable, and Paging Control. The NCA also meets NFPA requirements for firefighter smoke control stations and HVAC.



NOTI-FIRE-NET Web Server (NWS)

Using a standard IP-based Ethernet connection, NOTI-FIRE-NET Web Server (NWS) gives authorized personnel the ability to view fire alarm network and device status from the office, home or on the road. NWS can automatically send up to 50 email or text messages to notify key facility maintenance and support personnel of a trouble or emergency event.



Honeywell Confidential. For internal use only.

Product and Service Solutions



NOTI-FIRE-NET™

NOTI-FIRE-NET is a series of modules and products that allow a group of FACPs and other control equipment to link, forming a true peer-to-peer network. Equipment that connects to NOTI-FIRE-NET may be referred to as a network node. The minimum hardware requirement for NOTI-FIRE-NET is two nodes connected via wire or fiber optic cable. Each network node requires a unique node address and communicates with other nodes via a network interface board.



IP Communication/Voice over IP (VoIP)

NOTIFY-IP uses voice over IP (VoIP) technology to send encrypted, real-time voice instructions for preserving life and property throughout a single large facilities, multi-building campuses or multi-site enterprises. Within seconds, facilities all over the world can be notified of a potential or existing emergency. With NOTIFY-IP, the network connection is continuously monitored to ensure system integrity and reliability.

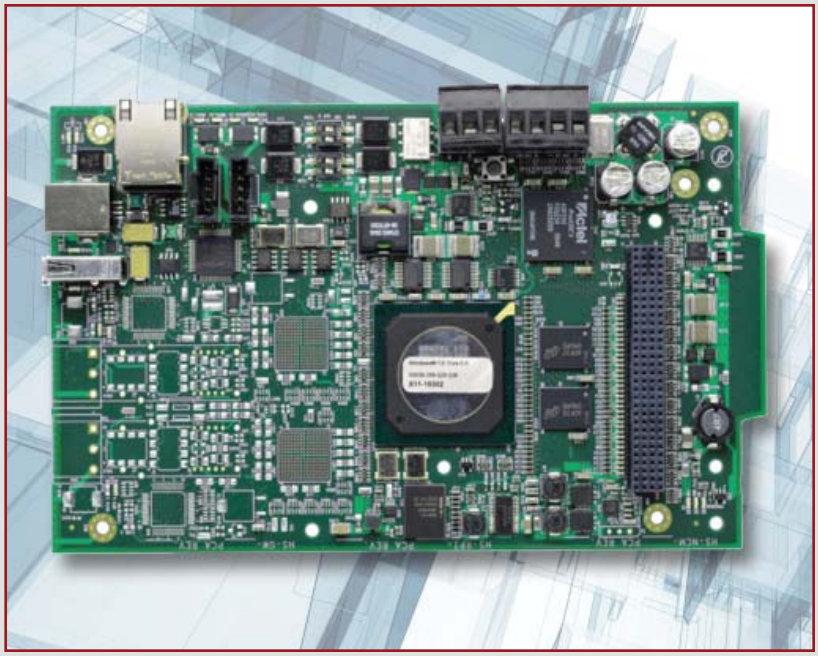


Wayfinding Technology

Current network annunciators offer a limited amount of information from the FACP—usually no more than which devices are in alarm. NOTIFIER's FirstVision wayfinding technology displays entire floors with the location of all active alarm system devices, potential hazards, additional access and egress routes, as well as standpipe, stairway and emergency shutoff locations throughout the building. Anything that might help or hinder an emergency responder is clearly indicated on a wallmounted LCD touchscreen that can be used without prior training.

Honeywell Confidential. For internal use only.

Product and Service Solutions



Modbus

Modbus is among the most widely supported, easily implemented open network protocols in the world. It uses a TCP-based communication to establish master-slave/client-server links between intelligent devices in industrial control and building automation systems. Modbus is often employed in mines, gas detections, solar charging systems, water districts and other industrial applications that use Modbus TCP/RTU with a Supervisory Control and Data Acquisition (SCADA) workstation. NOTIFIER's Modbus Gateway enables outbound communications from the FACP network to the SCADA workstation.



BACnet

BACnet is an ISO-standard data communication protocol used by building automation and control networks to allow different manufacturers' equipment to work together, including HVAC, fire alarm, life safety, lighting and access control systems. Devices on a BACnet network are represented as objects. As events occur, the object properties are updated in real-time and messages are sent to the appropriate BACnet client workstation. The BACnet client may also make requests to read properties of BACnet objects. The NOTIFIER BACnet Gateway enables outbound communications from the FACP network to the BACnet client.

Honeywell Confidential. For internal use only.

Product and Service Solutions

Emergency Communications System (ECS)

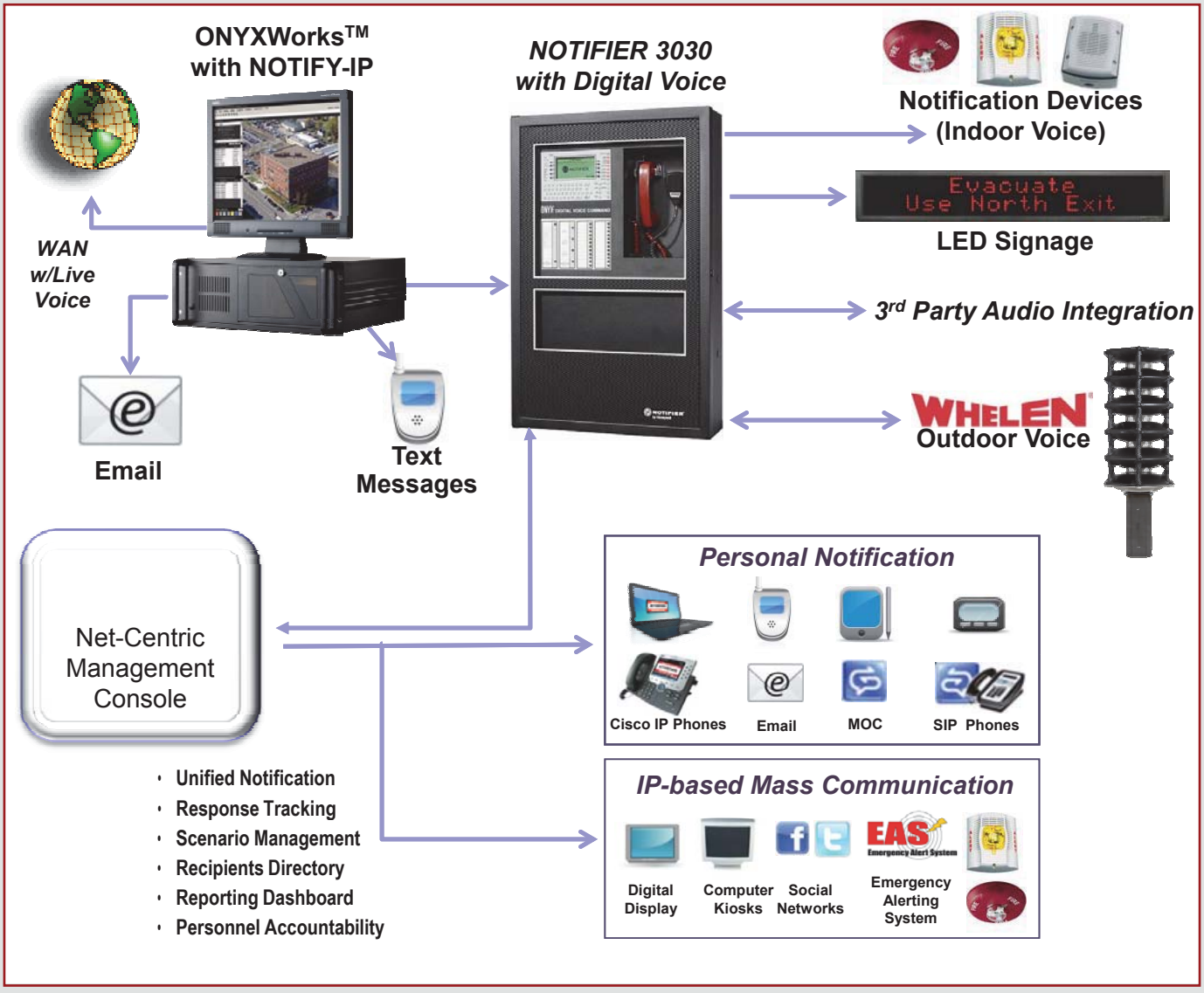
An Emergency Communications System (ECS) is any system that is organized for the primary purpose of supporting one- and two-way communication of emergency messages between both individuals and groups. These systems are commonly designed to integrate messaging across a variety of technologies, forming a unified system intended to optimize communications during emergencies. ECS is sometimes referred to as Mass Notification, primarily by the military.



Honeywell Confidential. For internal use only.

Product and Service Solutions

Emergency Communications System (ECS)



Honeywell Confidential. For internal use only.

Product and Service Solutions

Emergency Communications System (ECS)



NOTIFIER Digital Voice Command

Towering high-rises, sprawling college campuses, and mass transit may have thousands of people occupying them at any given moment. Informing everyone of an emerging crisis in these spaces is critical to protecting life and reducing injuries. NOTIFIER's Digital Voice Command makes it possible. Digital Voice Command (DVC) systems can be distributed throughout multiple buildings and linked together via the NOTI-FIRE-NET intelligent network. Each system can operate independently in case of a building-specific emergency, or cohesively as part of unified ECS for large-scale emergencies. Using the DVC command center, authorized personnel can distribute emergency voice messages to an entire campus or to specific areas.



NOTIFIER FirstCommand

(Standalone Sidecar Audio)

Using a combination of interior and exterior speakers, NOTIFIER's First Command will alert an entire building of an emergency situation and instruct the occupants on the appropriate course of action. Live emergency paging is easily accomplished using First Command's integrated microphone.

Honeywell Confidential. For internal use only.

Product and Service Solutions

Emergency Communications System (ECS)

Remote Paging Unit

The NOTIFIER Remote Paging Unit (DVC-RPU) expands the capabilities of the digital voice command (DVC) system for applications that require a remote paging station in a compact footprint that can be distributed throughout a facility. Though most commonly used in military facilities, remote paging units can be specified or added to almost any facility where the main control panel is inaccessible or a distance away from the incident scene. Remote paging units allow trained operators to activate pre-recorded messages or deliver live voice messages without having to return to the main control panel or workstation. Having RPUs available throughout a facility will save significant time during emergencies when seconds and minutes truly count.



Honeywell Confidential. For internal use only.

Product and Service Solutions

Emergency Communications System (ECS)

LED Signage

LED signs can be placed in areas where large numbers of people assemble, such as mass transit terminals, sports arenas and airports. LED signs also play a critical role in buildings where the occupants may be hearing impaired or where high ambient noise levels make voice messages less intelligible.





High Powered Speaker Arrays (HPSAs)

HPSAs can easily and seamlessly be incorporated into a NOTIFIER ECS to provide intelligible voice messages outdoors. A combination of voice messages and siren tones from the HPSAs will alert personnel who are outdoors on breaks, arriving or leaving work, or visiting the facility. HPSAs are a critical component of any campus ECS system, such as colleges and universities where there are typically many people outdoors, including students, employees and staff.

Honeywell Confidential. For internal use only.

Product and Service Solutions

Emergency Communications System (ECS)

Distributed Recipient Mass Notification Systems (DRMNS)

DRMNS provides two-way emergency communications via a wide range of platforms, including phone (voice), text, e-mail, computer pop-ups and social media. Capable of delivering multi-modal communications through a single interface, DRMNS is a powerful ECS tool—one that complements NOTIFIER'S voice products to provide a full range of communication alternatives.





CAP-GW

The Common Alerting Protocol Gateway (CAP -GW) translates zone activations on an NFN network or a high-speed NFN network to industry standard Common Alerting Protocol (CAP) messages for CAP-compliant consumers, like the DRMNS systems

Mass Notification over IP Technology

NOTIFY-IP uses voice over IP (VoIP) technology to send live, direct voice instructions for preserving life and property throughout a single large facility, multi-building campus or multi-site facilities globally. Within seconds, facilities all over the world can be notified of a potential or existing emergency. Activation of NOTIFY-IP is simple; the operator selects the desired paging location(s), clicks the "Start Paging" button, and speaks into the microphone with the appropriate emergency message.

Honeywell Confidential. For internal use only.

Product and Service Solutions

Emergency Communications System (ECS)



Emergency Response Plan

A document outlining the types of emergencies that could impact a business or site, the resources available to mitigate such emergencies and the actions required of individuals during each emergency. An emergency response plan typically provides details for severe weather events, fires, chemical leaks and/or domestic violence events. The emergency response plan is a document created with the assistance of management personnel, facilities and local responders such as fire, police and EMS. It should be reviewed and exercised regularly.

Honeywell Confidential. For internal use only.

Product and Service Solutions

Emergency Communications System (ECS)

Below we show the progression of effectiveness in ECS technology, comparing a range from indoor voice systems to full DRMNS functionality.

	Standalone	Integrated
DRMNS (Step 4)	InstantAlert Plus for NOTIFIER	AtHoc DRMNS Interfaced with the CAP Gateeway
Outdoor Voice (Step 3)	Whelen HPSAs, relay-activated	Whelen HPSAs with NAUXCS voice-activated interface board
LED Signage (Step 2)	LED, Inc relay-activated LED signs	Inova LED signs with LEDSIGN Gateway
Indoor Voice (Step 1)	NOTIFIER First Command - side car audio	ONYX Digital Voice

For additional information, refer to the Emergency Communications Systems Sales Playbook.

Honeywell Confidential. For internal use only.

Product and Service Solutions

eVance™ by Honeywell - Service and Inspection Management Software

eVance™ Services is a leading-edge software offering that automates and streamlines inspection and service management operations for ESDs. The **Inspection Manager** uses data pulled directly from Honeywell Fire Systems fire panels to dramatically reduce the number of labor hours required to conduct walk tests. The **Service Manager** provides centralized information management and communication tools that reduce errors, eliminate redundancies and allow dispatchers to work more productively.

eVance™ Services is managed and served in 'the Cloud,' from a secure data center. You can purchase licenses based on the number of users, with multiple options available to purchase the **Inspection Manager** and **Service Manager** separately—or together as software bundle. Updates are managed automatically, so you can always be confident they're running the latest version of the software with new features planned for release every year.

For more information on eVance™ by Honeywell and how it can help your business, visit our website at:

https://evance.notifier.com/Pages/default.aspx



Honeywell Confidential. For internal use only.

Product and Service Solutions

Honeywell Fire Services Group

Honeywell FSG (Fire Services Group) is a full-service company that provides application, technical, marketing and financial services to Honeywell's Fire Systems Group Global network of Engineered Systems Distributors. FSG provides the End User one point of contact to Honeywell's Global network of Engineered Systems Distributors and assures the User of superior service and support.

For more information on Honeywell Fire Services Group, visit our website at:

https://http://www.honeywellfsg.com/

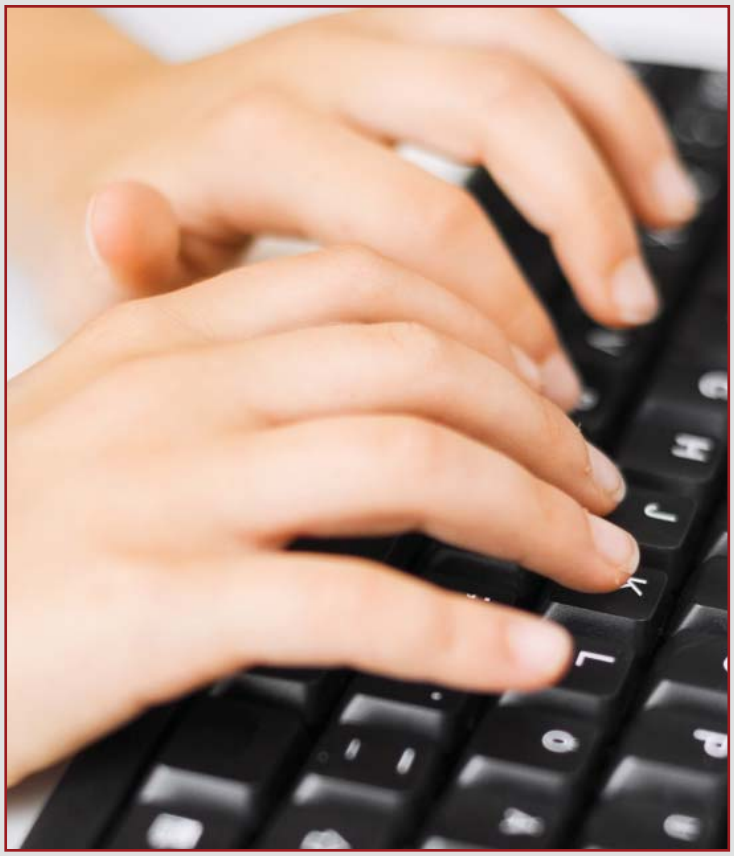


Honeywell Confidential. For internal use only.

Reference Section - Toolkit

The remaining materials in this Playbook include links to online sales resources, datasheets and specifications as well as definitions of key terms, an Opportunity Checklist, NOTIFIER Value Partners, Case Studies and information about potential funding sources.

This section is intended to serve you as an ongoing reference, which you can return to as needed to support your sales efforts.





Honeywell Confidential. For internal use only.

NOTIFIER Solutions Opportunity Checklist

Company Name:

Contact Name:

Telephone:

Email:

Solution	Requirement (Y/N)	Comments
Core Fire		
Basic Addreassable Fire System		
Addressable Fire System with Audio		
Network Audio		
Standalone Audio		
Addressable with Releasing		
Smoke Control		
Addressable with Gas (FM6320)		
Standalone Releasing		
Conventional		
Other		
Standard Detection		
Photo		
Ion		
Heat		
Beam		
Other		
Advanced Detection		
Acclimate Plus (Heat/Photo Adjusting)		
IntelliQuad (Multi-criteria)		
IntelliQuad Plus (Multi-criteria with separate CO		
VIEW (Early Warning)		
Intelligent FAAST (Aspirating)		
SWIFT (Wireless)		
Other		

Honeywell Confidential. For internal use only.

NOTIFIER Solutions Opportunity Checklist (continued)

Solution	Requirement (Y/N)	Comments
Gas and Flame Detection		
Commercial Gas		
Light Industrial Gas		
Flame		
Other		
Notification Appliances		
Horn/Strobe		
Low Frequency Horn/Strobe		
High Fidelity Speaker (Standard)		
High Decible Speaker		
Outdoor Speaker		
Other		
Networking		
NOTI-FIRE-NET		
High Speed NOTI-FIRE-NET		
ONYXWorks (Graphical Workstation)		
Ethernet (TCP/IP)		
FirstVision (First Responder Annunciator)		
NOTIFIER Web Server		
BACnet Integration		
Modbus Integration		
DACR Receiver Integration		
Other		

Honeywell Confidential. For internal use only.

NOTIFIER Solutions Opportunity Checklist (continued)

Solution	Requirement (Y/N)	Comments
Emergency Communication (ECS)		
Digital Audio		
NOTIFY-IP (Voice over IP Paging)		
Digital LED Signs		
Giant Voice		
DRMNS		
Common Alerting Protocol		
Dual Horn/Strobe		
Multi-color Strobes		
Threat Buttons		
First Command (Standalone)		
Other		
Services		
eVance™ Inspection/Service Software		
Customer Experience Center		
Tech Support		
Training		
HFSG Support		
Other		

Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Web Information and Research Sources

Click any link below to view the documents

NOTI-FIRE-NET (NFN)

High Speed NOTI-FIRE-NET (HS-NFN)

ONYXWorks

NOTIFIER Network Control Annunciator (NCA-2)

NOTI-FIRE-NET Web Server (NWS-3)

ONYXWorks Receivers Gateway

LEDSIGN-GW Sign Gateway

ONYX FirstVision

BACNet Gateway

Manuals

Datasheets

Engineering Specifications

Product Presentations



Additional Playbooks:

Advanced Detection

ECS

eVance by Honeywell

Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Case Studies

The Case Studies on the following pages capture highlights of successful NOTIFIER network and integration installations. For a more in-depth look at many of these projects, please visit the NOTIFIER Case Studies website.

http://www.notifier.com/newsroom/case_studies/Pages/Notifier-by-Honeywell-case-studies.aspx

- **Clear Creek School District**
- **Towson University**
- **Marriott Marquis**
- **World Ski Championships**
- **Central Arizona Project**
- **Houston Airport System**
- **Colorado State University**
- **New York City Station**



Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - Clear Creek School District



Fire Alarm Upgrade Unites Sizable School District

When Thomas Young talks about the size of his school district, he's not making a joke about how big everything is in the Lone Star State. The Clear Creek Independent School District is about 20 miles south of Houston, Texas, with 40,000 students from pre-kindergarten to 12th grade. Young, the special projects supervisor, handles fire protection and other security responsibilities for the district. He monitors 49 sites, including 44 schools and five auxiliary sites, which house technology, transportation and more. Those sites cover a vast geographic landscape,103 square miles, with some as far apart as 20 miles, which played a key role in the school district's requirements for its recent fire protection upgrade. This school district has used NOTIFIER fire alarm systems for decades with the previous upgrade taking place in the early 1990s. Now two decades later, the school district decided it was time for a revamp. Ease of use, monitoring and maintenance, along with some cost efficiencies provided by the systems' inherent backward compatibility, have put the entire district's fire protection in a class of its own.

Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - Clear Creek School District



Monitoring Entirety

Today's technology has given Young something he has continually wished for – a fully integrated system that can be monitored from his office, allowing Young to keep tabs on all components of each system, in each building, miles away. "He always wanted some way he could monitor the status of all the panels in his district without having to make a site visit every time a principal called and said, 'it's making noise,'" says Steve Cloninger of Fire-Tron, Inc., a NOTIFIER Engineered Systems Distributor (ESD) in Stafford, Texas.

Young's office is equipped with an ONYXWorks workstation from NOTIFIER, capable of displaying site-specific graphics for each facility and its fire alarm components. Information on any event -- be it a trouble, supervisory or true fire alarm -- is displayed automatically on the workstation in real-time. When Young is away from his office, the workstation can send emails to multiple recipients, immediately notifying of any system events occurring in the district and greatly improving department response times. Employing space-age technology such as this is not surprising for a school district that essentially surrounds NASA's Houston Space Center. "Like most schools, we have an Intranet. All of our buildings are connected with fiber Ethernet," says Young. The flexibility of the NOTIFIER system allowed Cloninger to use that fiber network, piggybacking on the existing framework, to deliver real time information to Young's office on the fire alarm systems throughout the district. "By using that network, I can put a workstation in one location and monitor what's happening at all of the schools. Being able to reside on an Ethernet network made it really easy to connect point-to-point-to point," says Cloninger. "That's monitoring – it's the ability to see what's happening out there versus getting a call from a monitoring company saying 'You've got trouble at Clear Creek High School.'" The true enabling technology, says Cloninger was NOTIFIER's embedded gateway. ONYXWorks is designed to allow a combination of different technologies to tie into the network and be monitored on the same workstation. It features intelligent gateways to facilitate modular system integration, allowing for the continued expansion of the workstation's capabilities and its network functions. These gateways add more flexibility when integrating building operations and communicating over a local Ethernet or wide-area TCP/IP network. According to Fire-Tron Account Manager Richard Phillips, "We were able to go in and very easily add an embedded gateway in each location, tie into their existing Ethernet and monitor that [fire alarm] control panel."

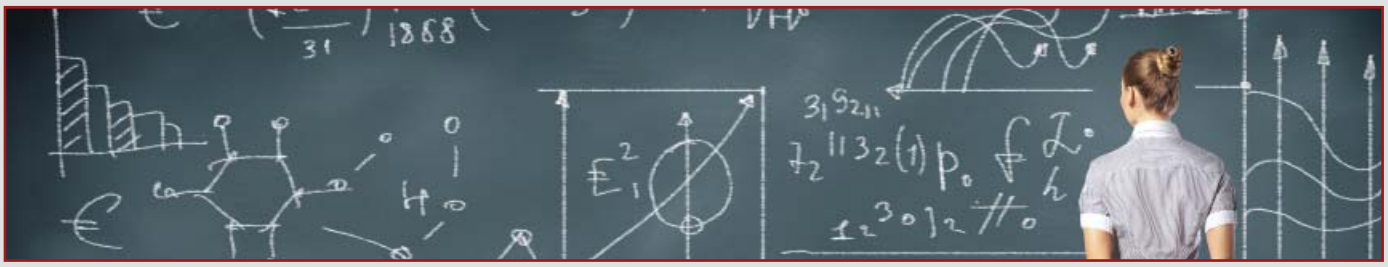
Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - Clear Creek School District

Facility Management Efficiencies

A variety of ONYX Series NFS2-640 and NFS2-3030 fire alarm control panels from NOTIFIER were installed throughout the district's facilities. Performing such a sizeable upgrade in multiple phases assisted not only with budgeting, but scheduling installation and testing around class times and other events. The backward compatibility of NOTIFIER technology kept some costs down, says Phillips. When each panel was replaced, most of the existing signaling line circuits – wire and devices – were kept in place and used with the new fire alarm systems. "It was simply a question of popping off the old panel and popping on the new one," Phillips says. "That makes it very attractive for a panel upgrade." To give a sense of scale, Cloninger described the installation at one of the facilities, a combined campus including elementary, middle and high school students. An assortment of 700+ smoke detectors, 150 pull stations, 100+ duct detectors and 50+ heat detectors were all networked to two NFS2-640 panels and one NFS2-3030 – all of which communicate back to the ONYXWorks work station in Young's office. Cloninger says Young has already begun to enjoy efficiencies from the new system. When he gets a call from maintenance at a building regarding a system alert, he does not have to dispatch a technician out to the school to decipher the issue.



Nearly all of the information he needs is provided by the ONYXWorks workstation. Young also utilizes it to perform random checks of various fire alarm systems to assess current conditions. "It wasn't a matter of driving down the street," says Cloninger. "Sometimes it involved tens of miles. It improved the efficiency of his department tremendously." Although Young monitors the entire network remotely, he has learned having a system that is easy-to-use is crucial to supporting the work of administrators in each building. "Basically, we wanted to have a simple-to-operate system for the principals and teachers, something that told them where it was and what was going on, something that was easy to maintain," Young explains. Monitoring and maintaining such a large number of fire alarm systems can be an overwhelming task. Instant alerts, such as those that indicate when a specific detector needs to be cleaned, can save a tremendous amount of time and greatly reduce false alarms. "At the ONYX Workstation, he can view those buildings real-time, see what's going on," says Cloninger. "And he can see exactly what's going on with each individual device in that building, if he wants to drill down to that level. He can look at graphics for the school, see where it's located, see what the status is." Working with a brand of fire alarms having a proven track-record of reliability and longevity like NOTIFIER, not to mention simplifying the supervision of student and faculty safety, appear to have enabled Clear Creek School District to set a new standard for K-12 public school fire protection.

Honeywell Confidential. For internal use only.

Reference Section - Toolkit



Project Profile - Towson University

Towson University in Towson, Maryland

Time is of the essence when disaster looms. Weather-related tragedies and terrorist activities of the past decade have created increased demand from public and private stakeholders for a reliable means of communicating critical information to large groups of people. This mass notification concept has received heightened attention from facilities personnel particularly in the military, educational and commercial/ industrial sectors.

Systems Assessment and Risk

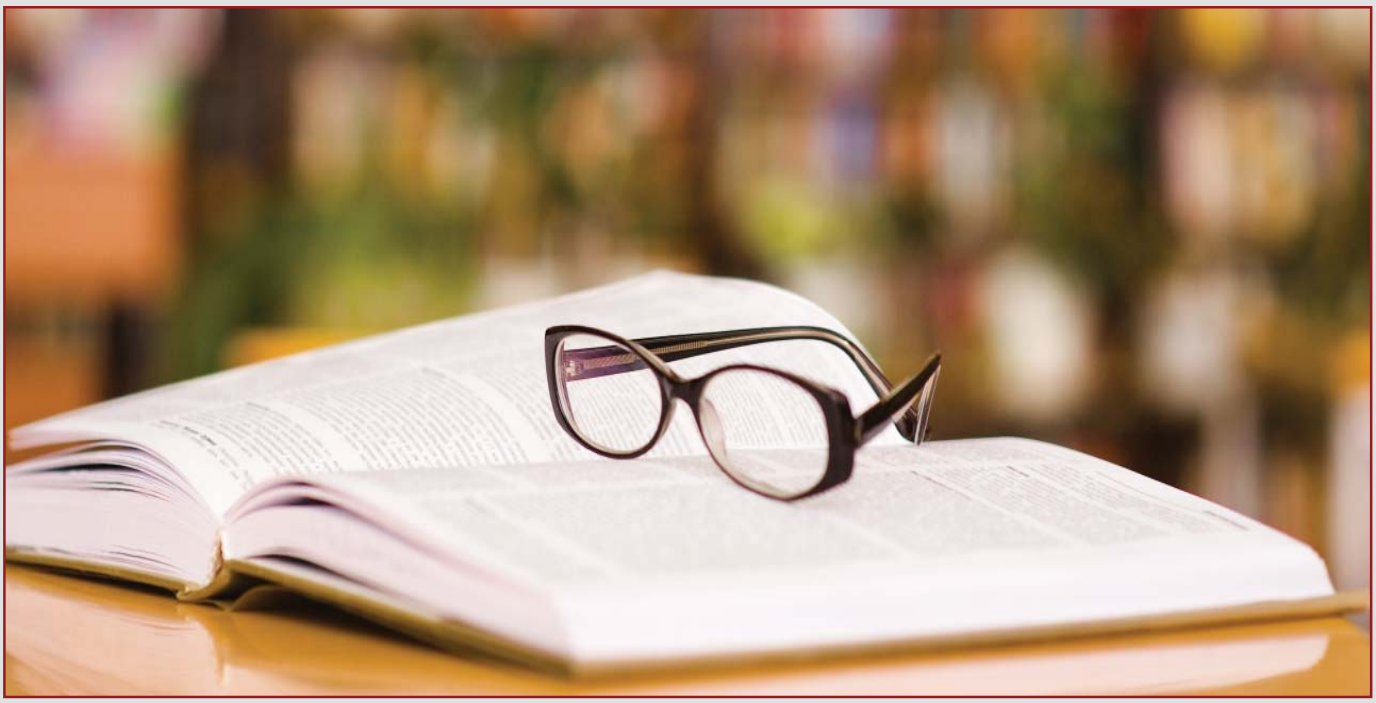
According to Paul Parrish, Towson University's environmental health and safety officer, "The issue of mass notification came up at Towson when someone asked how we can expect to communicate with students and staff in an emergency." Towson University encompasses more than 40 buildings, covering 328 acres within the town of Towson, 15 minutes outside of Baltimore. "When weapons of mass destruction or the possibility of a hazmat incident came up, we had to ask ourselves if we could realistically notify the staff and student population of an emergency situation in time to make a real difference," says Parrish. Towson's initial emergency communications solution comprised a text messaging system used to alert students, staff, parents and others. While such alerts proved to reach a good portion of Towson's population, university officials understood it was not a comprehensive solution. "We also have an outdoor public address system consisting of five [speaker] towers. University Police recently installed them on select buildings to provide adequate campus-wide coverage," says Parrish. "But we realized that this was not enough. We also needed mass

Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - Towson University

notification inside our buildings." The university already had standalone fire alarm EVAC (emergency voice/alarm communications) systems in half of its buildings. However, these systems operated independently, requiring users to be located within each building to activate communications. Looking for guidance, Parrish approached the school's current fire protection contractors, Fireline Corporation. "I asked Fireline's project manager if there was any way to connect these EVAC systems together so we can make announcements from a single location on campus. He looked into the technical details and came to the conclusion that it could be done," says Parrish.



Integrated, Economic Approach

Per Towson's specifications, Fireline worked to design a combination fire alarm/MNS with one point of monitoring and control. Making use of the individual fire alarm EVAC systems succeeded in saving the school a substantial sum of time and money. "The firm installed the in-building MNS systems we needed, which also are part of our campus-wide fire alarm system. Where the police department is responsible for the outdoor speaker system, I'm responsible for the mass notification/ fire alarm system," says Parrish. Twenty of the schools' buildings are equipped with NOTIFIER EVAC systems featuring standard pre-recorded messages and microphones for authorized users to provide real-time announcements. Systems in seven of the buildings categorized as high-rises also include firefighter phones that enable first responders to communicate directly with each other. Currently, Fireline is upgrading the remaining school buildings to include ONYX Series EVAC systems from NOTIFIER.

Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - Towson University

Once complete, all buildings' systems will feature both fire alarm and mass notification protection, all of which will be tied together for centralized, campus-wide control. In retrofit applications similar to Towson, capitalizing on the strengths of existing fire alarm communication and notification technology can deliver intangible benefits not common to alternative MNS offerings:

- Supervision – These systems are self-monitoring, meaning immediate alerts are sent to central monitoring station personnel any time an issue that could compromise system functionality is detected (i.e. loose wire, detector tampering, etc.).

- Survivability – Many of today's fire alarm network technologies comprise distributed intelligence, which can help to assure functionality during a catastrophic event. As a result, if one part of the network is damaged, the remaining components continue to operate properly.

- Intelligibility – Clarity of communications is critical (indoors and outside) increasing speaker volumes can many times distort the message. Proper MNS design takes background noise, room size and acoustics into consideration, while incorporating visual notification such as LED signage and special-colored strobes.

- Testing Requirements – Per NFPA (National Fire Alarm Association) code, all commercial fire alarm systems, in both public and private facilities, are to be tested and properly maintained on a semi-annual basis. Failure to do so typically results in the loss of occupancy permits.

System Unification and Control

Utilizing NOTI-FIRE-NET network technology, Reedy has been able to tie together new and existing EVAC systems throughout the campus. Connectivity between individual buildings has been accomplished using the university's existing, campus-wide Ethernet network—another considerable cost saver. A NOTIFIER ONYXWorks graphic workstation located at the university police department provides school officials with a common point of command and control. Here, campus security and safety personnel can view all system events and maintenance alerts as well as issue critical instructions to specific areas or groups of buildings. Much like a public address system, this central workstation also allows for day-to-day announcements to be made. Towson's campus-wide network facilitates easy integration of similar systems during future campus expansions. The Internet's worldwide reach make it possible for Towson to connect and control other fire alarm/MNS on a local, regional and global basis. Evolving building codes and public expectations continue to pressure for better, more comprehensive MNS within all facility types. It's important for security directors and others in positions of responsibility to consider future MNS needs prior to performing a major building systems renovation, especially when upgrading fire alarms. According to Parrish, "It's better to upgrade to EVAC technology now, as opposed to traditional horns. So when mass notification is needed, the transition will be smooth and cost effective."

Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - Marriott Marquis

New York Marriott Marquis

Situated in the heart of New York City's Times Square and the Broadway Theater district, the New York Marriott Marquis has served as a major landmark since its opening in 1985. Fifty-one stories high (53 floors including below-ground levels), with New York City's only rotating restaurant at its peak, it features a total of six restaurants and lounges, a major Broadway theater (Marquis Theatre), a built-in parking garage and the largest enclosed atrium in the United States. To offer guests the most advanced technology in life safety systems, the Marquis collaborated with fire protection consultants from Rolf Jensen and Team Members Professional Engineers, P.C., (RJA) on the design of a new addressable system for the entire facility.



The System

Edward Armm, SET, a Senior Consultant for RJA, wrote the specification and solicited bids for the equipment and installation. The winning bid was prepared by Alan Doorly, CET, Director of Operations for Cross Fire and Security Co., Inc., of Brooklyn, New York. Utilizing NOTIFIER's ONYX® Series of fire protection systems, Doorly was able to engineer a user-friendly system capable of supervising a large number of nodes with several thousand initiating and indicating devices. A total of 52 NFS2-3030 fire alarm control panels (FACP) function as the nodes, essentially one per floor, and all are connected together via the NOTI-FIRE-NET™ high-speed, peer-to-peer communications network. "The number one reason you would install a network node system in a building of this size and magnitude is to provide additional survivability during not just a fire condition but for all types of emergencies," says Doorly. A NOTIFIER NFS2-3030 FACP located on the first floor communicates with each of the other 51 nodes by means of Style 7 (Class A) wiring. This continuous loop of wiring, connecting all nodes throughout the system, ensures no interruptions to communications if wiring is cut or damaged. To aid in emergency response, the Fire Command Center can be accessed by fire fighters immediately upon

Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - Marriott Marquis



entering the building. In addition to the main FACP, the Command Center includes an ONYX NCS (Network Control Station) high-performance desktop computer designed to display the locations of system components and alarm events superimposed on CAD drawings of the facility's floor plan. Here, first responders can also utilize an ACS-24AT annunciator to control loudspeakers and warden phones throughout the facility. The facility's engineering and security offices are equipped with a Network Control Annunciator (NCA) for immediate monitoring access of the entire system. The NCA is a 640-character backlit LCD display that operates as a node on the network. The Marriott Marquis' new Notifier System was also integrated with the existing public address (PA) system. The Fire Command Center is equipped with a Digital Voice Command Center located on the first floor level which allows certified Fire Safety Directors to make broadcast announcements. Integration of a PA system with a multi-node fire alarm such as this allows announcements to be made to specific areas such as bedrooms on a certain set of floors, in stairwells or throughout the whole facility. For the Marriott Marquis, "zoned paging" is especially useful for directing announcements to the garage and restaurants. Large-Scale, Rapid Detection
The Marriott facility is equipped with more than 3,500 initiating devices, including smoke detectors, pull stations, waterflow switches and temperature sensors, which communicate in groups with the node FACP on their particular floor. A patented FlashScan® protocol polls device groups, stopping to concentrate on individual devices only when new information is detected and processed by the FACP. The net effect is a response speed greater than five times that of earlier versions. According to Armm, speed of communication is crucial in a system this large. "Even if we went to the farthest extreme of this system, in less than 5 seconds we had an active alarm," says Armm. "As big as the system was—it was that quick."

Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - Marriott Marquis

Challenging Aspects

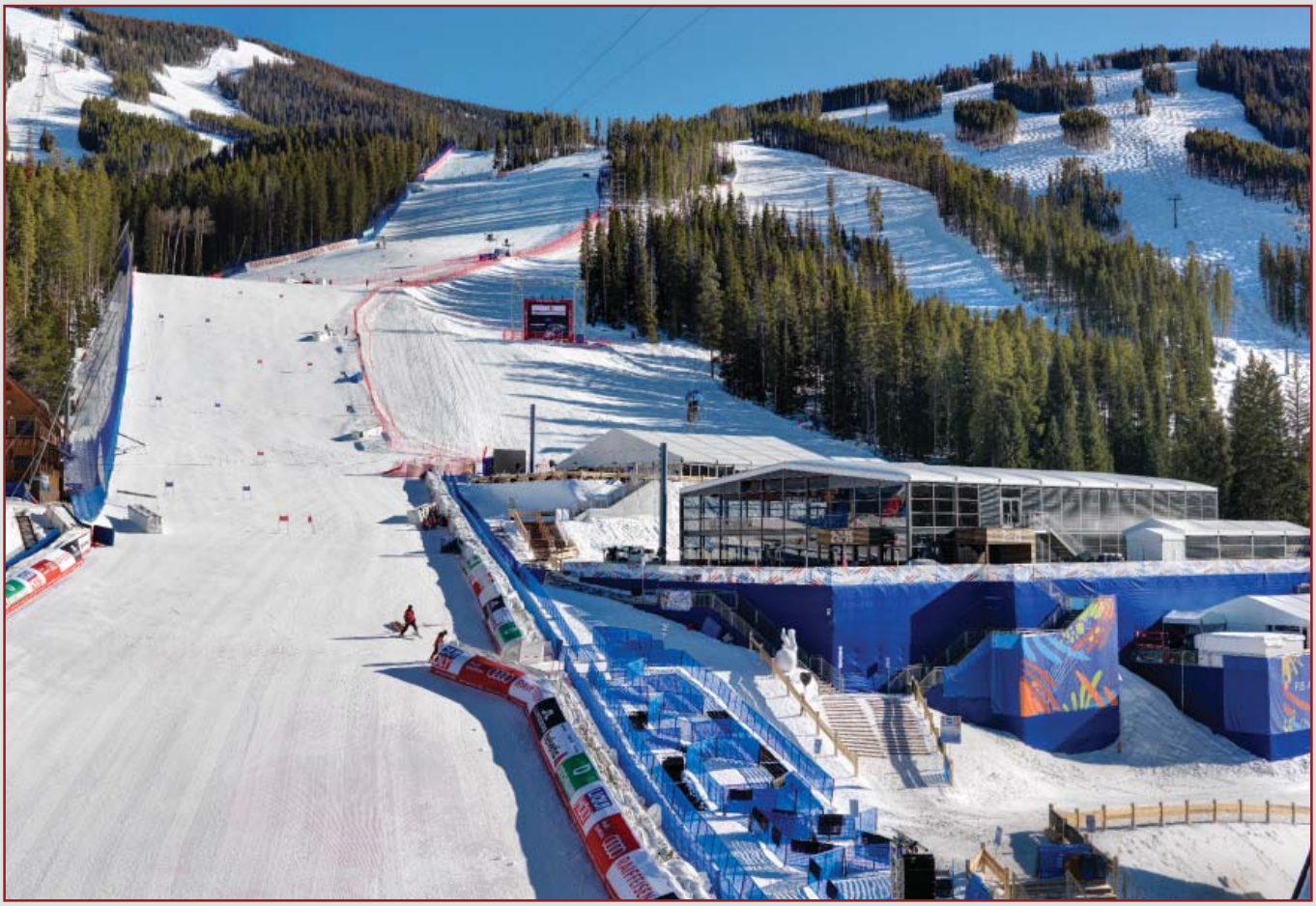
The hotel's atrium rises from the 10th to 45th floor and all corridors outside of the guest rooms open to it. One of the project's most challenging design aspects involved integration of the atrium's existing purge control system with the new fire alarm. The purge system consists of two colossal fans, designed to remove smoke from the building and pull in fresh air quickly. Through the facility's building management system (BMS), the new fire alarm system activates fans during any alarm on a floor overlooking the atrium. Beam detectors on one of every three floors pointed across the atrium also trigger an alarm and the purge system if smoke is detected within the atrium. New York City requirements typically mandate purge systems, as well as stairway pressurization, be initiated by the fire department. In this instance, an exception was made due to the large number of occupants usually present within the Marriott Marquis. The system protecting the Marquis Theatre is part of the facility's 52-node network, but is programmed to respond differently. The possibility of a non-emergency event in another part of the building emptying a theatre of more than 1,600 people was a scenario Cross Fire had to program the system around. The theater's FACP is located immediately off-stage and monitored by a trained Fire System Director. This individual must be able to view the stage and audience at all times. Using the theater's FACP, the Fire System Director can make live voice announcements and manually trigger a deluge system to place a wall of water between the audience and stage. The peer-to-peer architecture of the NOTIFIER ONYX Series system allows for easy installation and minimal wiring, which limited the installation's effect on the building's façade. "There were very high-end finishes at the hotel - fancy wood, marble, stainless steel. Whatever the surface was, when they (Cross Fire) were done, it looked like they were never there," says Armm. According to Armm, "It was the best managed job I've ever been involved in. I'm sorry to have it end. The people from Cross Fire have a strong life safety ethic. They believe that what they do could possibly save a life."



Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - World Ski Championships



SWIFT™ FINISHES FIRST AT THE WORLD SKI CHAMPIONSHIPS

From Austria to Canada and everywhere in between, the most talented skiers in the world descended upon Colorado's Beaver Creek Mountain in February 2015. It was the third time that the prestigious International Ski Federation's Alpine World Ski Championships was held in the Vail Valley, this time in the town of Avon.

Only second to the Olympics, the World Championships is the largest gathering of ski racers in the world. As a result, organizers needed to set up a temporary facility to accommodate the countless TV and radio broadcasters scheduled to cover the races. The facility, known as The International Broadcast Center, was constructed out of shipping containers—one per country. Broadcast and fi lm-editing services were performed there nearly 24/7 during the two weeks of racing.

Located on the very edge of the ski course was another temporary facility, called the VIP Building, for platinum ticket holders. Its walls were made of glass, allowing spectators to watch the races right outside the windows.

Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - World Ski Championships

Challenge

Though not required by local code enforcement to install a fire alarm system within the temporary buildings, organizers decided to do so as a precaution. “They concluded it would be a good idea to have some form of fire protection in the buildings in case something happens, especially with all the electronics in the broadcasting facility,” said Tim Ward, NICET IV, general manager at Commercial Specialists of Western
Colorado.

The structures would be taken down soon after the race, so organizers did not want to waste time pulling wires across the buildings to support the fi re alarm system’s assorted field devices. Coupled with a tight deadline for installation and tear-down, it made sense to turn to wireless smoke detectors.

“Because of the ease of installation, it was just the perfect solution to go wireless,” said Joe Quinn, service manager at Commercial Specialists of Western Colorado. “By running a wireless system, we knew it would be beneficial because all we would have to do is place our bases and do the programming.”

Saving time was imperative; however, the amount of labor and materials costs eliminated with the wireless system turned out to be significant.

Solution

NOTIFIER recently launched its Smart Wireless Integrated Fire Technology (SWIFT) line of wireless smoke detectors, which were chosen for these temporary facilities. It’s a Class A commercial wireless system using a highly-reliable mesh network that integrates with new and existing ONYX Series fi re alarm systems.

Commercial Specialists of Western Colorado met all the deadlines for the fi re alarm installation as the wireless project came together quickly. With a traditional wire detection system, they would have spent at least two more weeks onsite, running wire. Such a speedy installation saved them time and labor; the wireless devices cost more, according to Ward, but the amount of time they saved in labor made up for more than the additional cost.

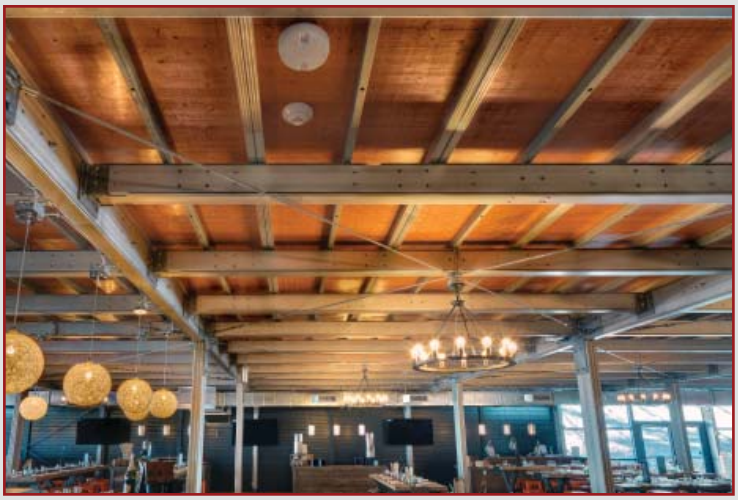


Ward and Quinn both said they were very pleased with the incredibly quick installation period of three days for the wireless devices. “I had one of my workers trim out an entire floor in less than 30 minutes,” Quinn said.
“The nice thing is you can screw them right to the deck and then you’re done. I honestly thought we would be there all day, but he came back quickly and said

Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - World Ski Championships



he was done. I was really impressed with that."

To install the system, Quinn simply had to program a distinct system profi le for each device; insert the batteries in each; install the devices in their specific locations; and launch the mesh network formation routine, which automatically evaluates the signal strength between all devices and creates all of the primary and secondary communication links for the mesh. "It was my first time with wireless, and I would absolutely do it again," he added. "This was one of the easiest installs I've ever been a part of. Everything came together really nicely."

For the lavishly designed VIP Building, the aesthetic advantages of using SWIFT came into play, according to Quinn. They didn't want to run a bunch of red fire alarm wires all over the building where they would be visible. In addition to wireless detectors, wireless monitor modules were used to support fi re pull stations. Quinn lauded the system's transparency, claiming it to be "absolutely cosmetically beneficial."

Result

Ward said he's worked with other wireless systems, but has never seen such reliability before. SWIFT is designed to provide maximum reliability. The SWIFT system's proprietary protocol uses supervised, redundant communication paths to ensure that event data reaches the fire alarm control panel. Signal strength for each communication link is evaluated, and the initial system setup automatically incorporates a safe margin to ensure that routine variations in the environment will not disrupt communication.

In a Class A mesh network such as the one used by SWIFT, each smoke detector and monitor module creates its own communication structure. That means communication goes from point A to point B through any number of these devices, creating redundant communication paths. With multiple paths to employ, the system's reliability is maximized; if one communication path is blocked, a system will use redundant pre-configured paths, or even establish new paths to insure that all transmissions reach the fire alarm control panel.

For facilities with existing NOTIFIER systems planning to grow, the SWIFT detectors offer an easy solution for protecting the new space. NOTIFIER's ONYX Series systems work with any combination of wired and wireless (SWIFT) devices.

"The expandability of the system is a huge benefit," Ward said. "You can keep adding on as big or small as you want to fi t your application." Beyond reliability, speed of installation, cost savings and aesthetic appeal, SWIFT can really benefit those facilities where the installation of wires is nearly impossible. To avoid drilling and running wire through concrete, decorative ceilings, historically signifi cant structures and even areas where asbestos is present, the use of Smart Wireless Integrated Fire Technology just makes sense.

Honeywell Confidential. For internal use only.

Reference Section - Toolkit



Project Profile - Central Arizona Project

CAP Pumping Plant Fire Protection System Upgrade Project

Water is one of Arizona's most precious resources and the Colorado River satisfies much of the demand. To meet that demand, the 336-mile-long Central Arizona Project (CAP) aqueduct annually delivers approximately 1.6 million acre-feet of Colorado River Water to cities, Indian Tribes and Farms in Central and Southern Arizona. The CAP consists of 15 pumping plants that lift the water approximately 2,400 feet from the Colorado River to south of Tucson. When originally built in the 1970s, these pumping plants were protected by conventional fire alarm systems in compliance with the existing codes. As a member of OSHA's Voluntary Protection Programs (VPP), CAP felt the Life Safety of its employees warranted the expenditure to upgrade with today's advanced intelligent fire protection technologies.

Project Scope

Chasse Building Team was selected by CAP as the Construction Manager at Risk (CMAR), which sub-contracted CopperState Fire Protection of Phoenix, Arizona to provide solutions from NOTIFIER. "It was time to take the 30-year-old systems in to the twenty-first century," said CopperState General Manager Tim Snow. According to Telma Reyes, CAP Contracting Officer, the upgrade included, "the installation of clean agent fire protection systems, wet pipe suppression systems, fire detection and alarm systems and an upgrade of existing CO2 systems. We modified existing damper systems and existing stairwell pressurization systems as well. Louvered doors were also replaced with solid panel doors. We prepared as-built drawings of all changes and additions." CopperState retrofitted four plants, installing new addressable fire alarm systems with a NOTIFIER NFS2-3030 control panel at the head end of each system. As one of the fire industry's largest capacity fire alarm control panels, it can support up to 3,180 addressable devices and includes a modular design for easy expansion and tailoring. Standardization of the systems across the plants is an operations and maintenance goal that was definitely obtained by the versatility of the new systems, according to CAP Senior Project Manager Michael Pierce. "We started out with a cookie-cutter design for each plant, but quickly found out each has its own idiosyncrasies," Pierce said. "You need to know your system and pay close attention to details, especially in the design review phase." Although the purpose of the upgrade was improved life safety, protecting the pump motors,

Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - Central Arizona Project

CAP's biggest assets, was a major objective. Four of the CAP pumping plants located in central and western Arizona are of similar capacity and design. Each plant has 10 pump units of various sizes ranging from 1,500 to 9,000 horsepower each. Each unit is protected by its own High Pressure CO2 fire suppression system, which is monitored and controlled by either an NFS2- 640 or NFS-320 fire alarm control panel from NOTIFIER. All fire alarm panels are networked with the main NFS2-3030 panel to allow monitoring, response and maintenance. Because these pumping plants were constructed with concrete walls up to 48" thick, rigid conduit raceways were installed by the CMAR for the fire alarm cabling used to transport high-speed data between the new NOTIFIER fire alarm control panels via the NOTI-FIRE-NET network. While each panel operates independently, this exclusive networking solution ties all panels together for easy monitoring of the entire network from one or multiple locations over hundreds of miles. The plants motor rooms utilize NOTIFIER Acclimate Plus detectors, an intelligent device that uses a combination of photoelectric and thermal sensing technologies for increased immunity to false alarms. Unlike traditional intelligent detectors, the Acclimate
Plus has a microprocessor in the detector head that processes alarm data. As a result, the device adjusts its sensitivity automatically, according to the environment, and without operator intervention or control panel programming. Intelligent devices, such as the Acclimate Plus detector, utilize the patented FlashScan communication protocol, which was developed to speed communication between control panels and analog intelligent devices. To protect the fire alarm controls in this industrial environment, CopperState customized industrial grade Hoffman NEMA 12 enclosures for many of the panels. The enclosures allow local maintenance staff to view alarm system status easily. As a member of OSHA's VPP, CAP facilities meet or exceed health and safety standards, and maintain injury rates well below National Bureau of Labor Statics rates. "We required a lot of extensive testing and had to make a number of changes throughout the installation process," says Craig Truax, CAP Electrical Controls Engineer. "If you're going to take on a project of this magnitude, having a contractor that's competent and willing to go the extra mile to meet your requirements is important."



Honeywell Confidential. For internal use only.

Reference Section - Toolkit

Project Profile - Central Arizona Project

Monitoring & Maintenance Made Easy

One of the most evident changes was the improvement in communication of alarms between the CAP headquarters in Phoenix, Ariz., and the four upgraded CAP plants. The NOTIFIER ONYXWorks graphic workstation allows facility management and security personnel to view the status of all fire alarm and fire suppression networks throughout the four pumping plants. Through CAP's existing Ethernet infrastructure, the ONYXWorks graphic workstation receives data from each plant's fire alarm network twenty-four hours a day, seven days a week over IP, allowing CAP personnel to view all system points, alerts and alarm events in real-time. "Our facilities are so remote that coordinating the communications of alarms is key," states JustinLarsen, CAP Lead Project Mechanical Engineer." By avoiding having personnel drive hours to check on a plant, this centralized system will save a lot of labor when it comes to monitoring and maintaining these systems." In conjunction with the monitoring centralization of all plant fire protection networks, CopperState configured CAP's ONYXWorks workstation to serve as a single source of control and supervision for the execution of:

- "Lock Out Tag Out" procedures when maintenance is required on the ten (10) CO2 systems and two (2) clean agent fire suppression systems
- Evacuation measures during a plant emergency which may not be fire alarm related
- Monitoring and Control of the Stairwell Pressurization system
- Monitoring and Control of all Fire Smoke Dampers
- Monitoring and Control of the plant Fire Pump
- Monitoring and Control of Plant Pump Units 1 thru 10 for Motor Differential Operations CAP is authorized to act as its own Authority Having Jurisdiction (AHJ). Additional fire protection consulting, inspection and certification services were provided by Rolf Jensen & Team Members, Inc. of Phoenix, Arizona. All fire alarms, sprinkler supervision and CO2 systems were tested for compliance to NFPA 13 and NFPA 72 standards.

Potential Advancements

The fire alarm and suppression systems at the remaining 11 CAP plants are scheduled to be upgraded over the next four years. Due to the simplification of fire alarm monitoring and control that CAP has gained through the NOTIFIER ONYXWorks system, CAP has planned for one workstation to be installed at each plant. Through the ONYXWorks platform, authorized CAP personnel will have the ability to broadcast messages to all or specific areas of a facility using audio and visual notifications; send distributed recipient messages such as emails and computer pop-ups; and even broadcast announcements for miles outside of the plant.

Honeywell Confidential. For internal use only.

Reference Section - Toolkit



Project Profile - Houston Airport System

George Bush Intercontinental Airport
• More than 11,000 acres with 5 passenger terminals and 20 passenger airlines

William P Hobby Airport
• More than 80 acres with 5 airlines and 42 hangars

Ellington Airport
• 3 active Runways serving the Texas Army National Guard, Delta Connection, and NASA

Airport system combined serves more than 50 million passengers a year including more than 8.7 million international passengers

It is the fourth largest multi-airport system in the nation, and sixth largest in the world.

Honeywell Confidential. For internal use only.

Reference Section - Toolkit



Project Profile - Houston Airport System

- 46 Fire Alarm Panels
- 5,600 Input Devices
- High Speed NFN
  - Style 7 Wire
- 3 ONYXWorks Work Stations
- ONYX-Notify email Notification
- Upgrading fire alarm panels NFS2-3030 and NFS2-640 systems
  - Utilizing field devices
  - Connecting some existing competitive panels
- All NOTIFIER panels/sub-networks were connected to the ONYXWorks Work Stations using NFN-Gateways over Houston Airports Systems LAN/WAN
- Upgrade was completed over a 2 year period.
- Every system remained operational during the upgrade
- Complete as-built drawing package provided
- Upon completion of this project, every system was clear of troubles and 100% inspected for the customer
- System training of the systems was provided at NOTIFIER training facility for end users for HAS personnel

Honeywell Confidential. For internal use only.

Reference Section - Toolkit



Project Profile - Colorado State University

• Highly accredited institution located in Ft. Collins, Colorado

• 152 buildings that sit on 5000 acres

• Additional 4600 acres dedicated for research

• Current student attendance of over 30,000 with the expectation to reach 35,000 in the next five years

CSU has place a high priority to expand their existing NOTIFIER network to implement Emergency Communication



Honeywell Confidential. For internal use only.

Reference Section - Toolkit



Project Profile - Colorado State University

System Plans

Current Network System

- 152 buildings with Fire Alarm systems on this campus
  - 93 FACP Nodes
  - 22 DVC Nodes
- 8 Ethernet Gateways installed
- 7 redundant Ethernet Gateways being installed
- 1 additional Ethernet Gateway to bring in the offsite Ardec Campus
- 3 ONYXWorks Workstations
- All building AED monitoring

Long Term Plans

- 59 buildings waiting to be added to the network
- Many building additions with new construction in the next 5 years, with talks of possibly adding the City of Ft. Collins to the network; meaning all city properties i.e. Library's, city buildings, rec centers, fire department and police.

CSU – Customer Feedback

"With NOTIFIER's drive for backwards compatibility, it has allowed CSU to expand their network as budgeting permits. NOTIFIER's support to the campus has allowed continued communication and design support. The relationship between NOTIFIER and CSU has never been better"

Mountain Alarm – ESD Feedback

"Mountain Alarm was challenged to create the most robust fire alarm network we could. In initial meeting with the CSU campus director's it was imperative that this system be "Bullet-Proof". As of the summer of 2014, we have done it! And I was thrilled to be a part of it all."

Honeywell Confidential. For internal use only.

Reference Section - Toolkit



Project Profile - New York City Station

Challenge

New York City Station wanted to upgrade their existing systems to a single, integrated fire alarm and emergency communications system. The 50 year-old train station operates 20 hours out of every 24, moving more than 250,000 passengers daily. The new system had to be installed without service interruptions. It also had to contend with high ambient noise levels, high-voltage station equipment and other environmental extremes.

NOTIFIER Solution

The new system connected 53 subpanels and more than 2,600 devices across 500 rooms, tunnels and platforms via 3 NOTIFIER NFS2-3030 Onyx Series fire alarm control panels. Conventional smoke and heat detection devices were installed in most terminal areas, with linear heat detection and fiber-optic linear heat detection for more challenging platform and utility areas. CD-quality voice functionality and more than 1,000 synchronized strobes provided effective, ADA-compliant mass notification.

Results

NOTIFIER's on-time equipment deliveries, field support and modular flexibility allowed contractors to build and test the system component-by-component, then integrate everything as a last step without interfering with the station's normal operations. The installed system meets the 21st-century needs of a large, urban transportation center and can be easily expanded to add functionality as needed in the future. With three command centers—two on-site and one out-of-state—New York City Station is ready to respond to any emergency.

Honeywell Confidential. For internal use only.

Funding

The Homeland Security Grant Program (HSGP) is a primary funding mechanism for building and sustaining national preparedness capabilities. Covered activities may include planning, organization, equipment purchase, training, exercises, and management and administration. HSGP is comprised of three interconnected grant programs, one or more of which may provide funding for ECS for some types of customers.

The State Homeland Security Program (SHSP) provides support at the state level for activities designed to prevent, protect against, mitigate, respond to and recover from acts of terrorism and other catastrophic events.

The Urban Areas Security Initiative (UASI) addresses the unique needs of high-threat, high-density urban areas, and assists them in building an enhanced and sustainable capacity to prevent, protect against, mitigate, respond to, and recover from acts of terrorism.

Operation Stonegarden (OPSG) funds efforts to increase cooperation and coordination among local, tribal, territorial, state, and federal law enforcement agencies in a joint mission to secure the United States' borders along routes of ingress and travel corridors, as well as states and territories bordering international waters.

For more information about these programs, including Funding Announcements, Fact Sheets, Planning Worksheets, FAQs and Supplemental Resources, please visit;
http://www.fema.gov/fy-2014-homeland-security-grant-program-hsgp



Honeywell Confidential. For internal use only.