



Designing NiKi

Making cybersecurity workflows so simple, anyone can drag, drop, and defend.



Overview

This concept explores how a seamless blend of conversation and interaction can transform the way non-expert users engage with cybersecurity. Through intuitive visuals, simplified logic, and approachable language, it aims to reduce intimidation, promote clarity, and guide users toward confidently assembling secure workflows. The design focuses on making every step feel discoverable, forgiving, and empowering—without compromising on capability or depth.



The target audience for this project is non-expert users—individuals within organizations who are not trained cybersecurity professionals, but are responsible for handling or supporting basic security tasks.

Target Audience

Before I get started, here's
the **Case Structure**



01 Research & Planning

In this phase, the focus is on understanding the user needs, fears, context, and pain points.



02 Design

The design process starts with low-fidelity wireframes to establish the layout and structure that creates a user-friendly framework that simplifies cybersecurity workflows.



03 Final touches

Translate the concept into clear, annotated wireframes and visual elements. Next, high-fidelity UI screen is created with a cohesive color palette, typography, and features.

UNCUT SANS

Font Used

Firewall Blue
Primary action buttons, highlights, links

#513DF6

Dark Web Navy
Warnings, triggers, alert states

#050726

Alert Orange
Warnings, triggers, alert states

#F0652E

Phish-Bait Gold
Nodes, tooltips, highlight banners

#FEC34D

Space Black
Canvas background, modals, focus mode UI

#000000

Whitelisted Snow
Backgrounds, text contrast

#FFFFFF

Ghost Port Gray
Borders, dividers, inactive buttons

#CBCBCB



Alerts



Success #58C423



Warning #FAAD14



Error #FF4D4F



Info #1890FF

User Type

Reluctant Cyber Guardian

Jessica represents users who inherit digital security responsibilities in non-tech fields like schools, nonprofits, or local government. She is competent and resourceful but needs a tool that respects her time, avoids jargon, and gives her confidence.

“I’m not a tech expert, but I can figure things out, if someone explains it in plain English.



Jessica Day



Primary User Persona: Jessica

Demographics

Name: Jessica Day

Age: 32, middle school English teacher, 10 years’ teaching experience

Role: School Teacher & Safety Coordinator

Institution: Middle School (Public School System)

Background: Degree in Education, strong classroom management, basic tech skills

Location: Oregon, Portland.

Traits: Curious, organized, compassionate, not afraid to try new tools but wary of “tech-speak”

Goals

- Ensure her team follows basic security protocols
- Automate repetitive security tasks without breaking anything
- Show accountability and compliance for internal audits
- Avoid needing constant IT help or approvals

Pain Points

Complexity

Most security platforms feel built for IT professionals, not educators.

Clarity

She often doesn’t know what a security workflow actually does behind the scenes.

Fear of Mistakes

She’s hesitant to press “publish” without clear reassurance.

Time Constraints

She’s too busy teaching to spend hours learning a new system.

Confidence

She second-guesses herself when using technical tools.

Tech

Tech Use: Comfortable with educational software (e.g., Google Classroom, Zoom)

Attitude Toward Security: Careful but not confident; not responsible for school-wide policies, but wants to support school safety



Frustrations

- Tools that assume she knows security jargon (like "SIEM ingestion" or "endpoint agent")
- Interfaces cluttered with settings she doesn’t understand
- No clear feedback, she doesn’t know if she set something up correctly
- Long setup times or steep learning curves
- Being scared to publish something that could “break the system” or affect student devices

Opportunity Areas

- Guided mode or onboarding wizard
- Drag-and-drop + chat hybrid for flexibility
- Pre-made templates to reduce starting anxiety
- Tooltips and visual previews for every action
- Microcopy in plain English to reinforce understanding
- Real-time error validation and “safe mode” publishing
- Encouraging feedback to build confidence

What?
Non-expert users tasked with assembling cybersecurity workflows often face a daunting mix of **technical confusion**, **decision anxiety**, and **fear** of doing **harm**.

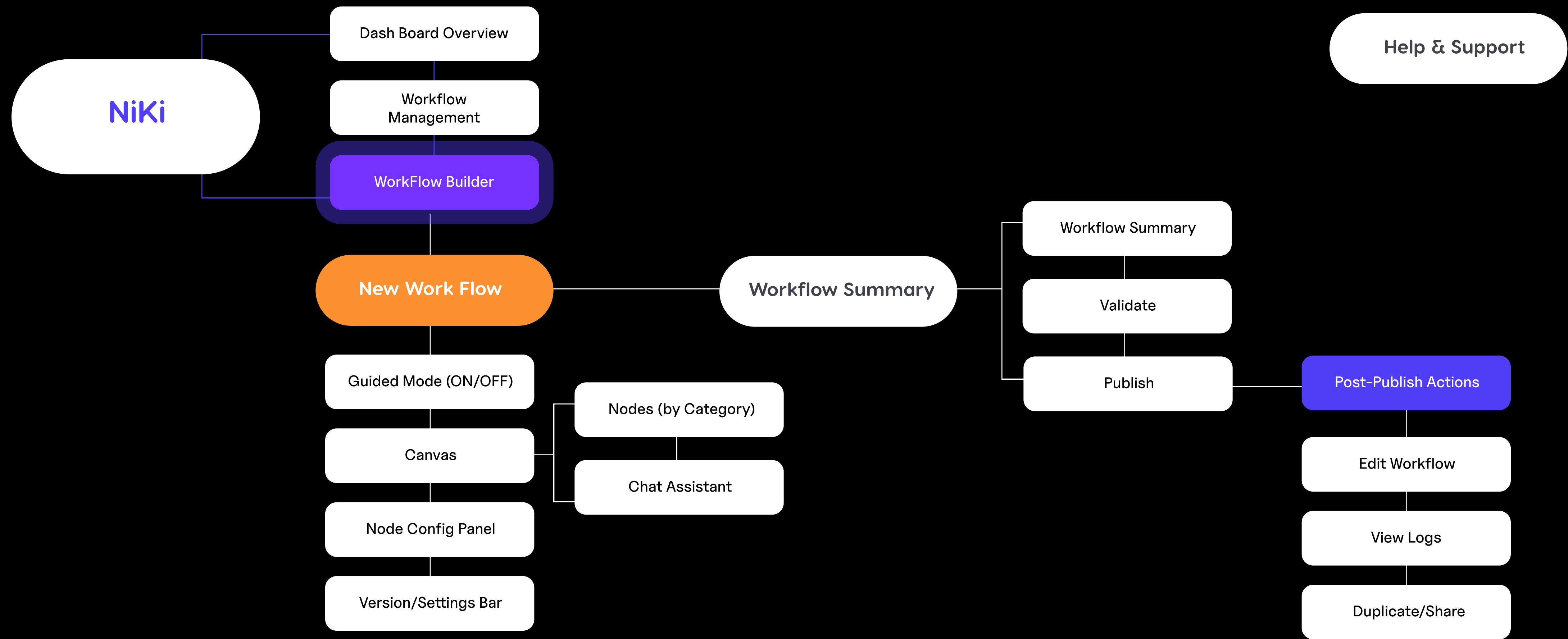
Who?
Unlike trained IT professionals, these users like school teachers, office managers, or small business owners **don't speak the language of security tools**. Terms like “endpoint agent,” “vulnerability scan,” or “SIEM ingestion” can be intimidating or meaningless, leading to **hesitation** and **inaction**.

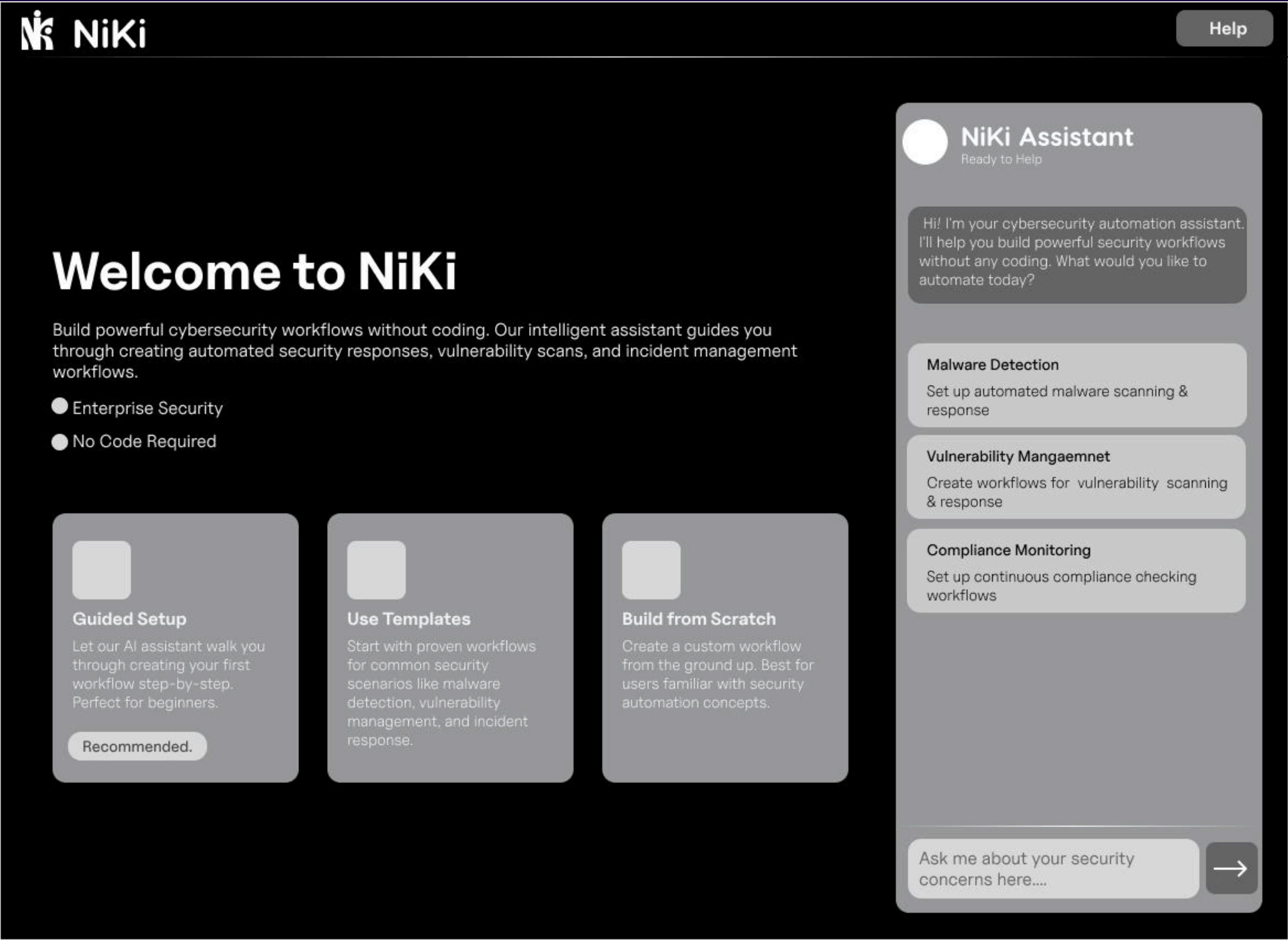
Why?
Their biggest fear isn't just **making mistakes** it's not knowing if they're doing something wrong. The absence of clear, **guided feedback** creates a **fragile user experience**, where every click **feels risky**.

How?
These users need a system that not only **simplifies technical logic** but also instills **confidence**. They benefit from **visual** builders, **real-time validation**, and **human-friendly** explanations at every step.

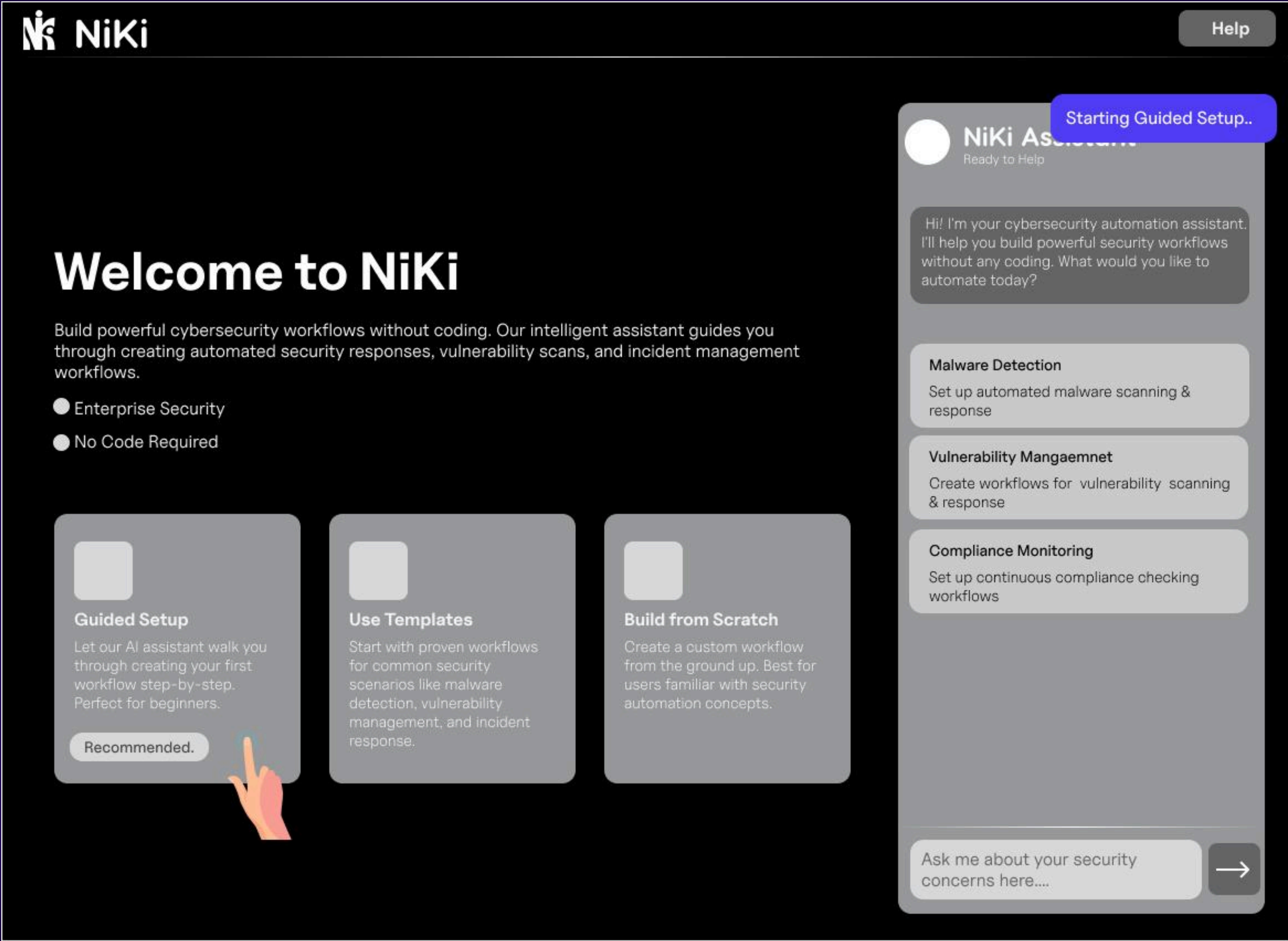
When?
When they **drag** a block to the canvas or connect a step, they want to understand in plain English what it does and why it matters. **Empowerment** for them isn't about access to power-user features, but about **feeling safe**, supported, and certain that they're contributing to a **secure environment** without needing to be an expert.



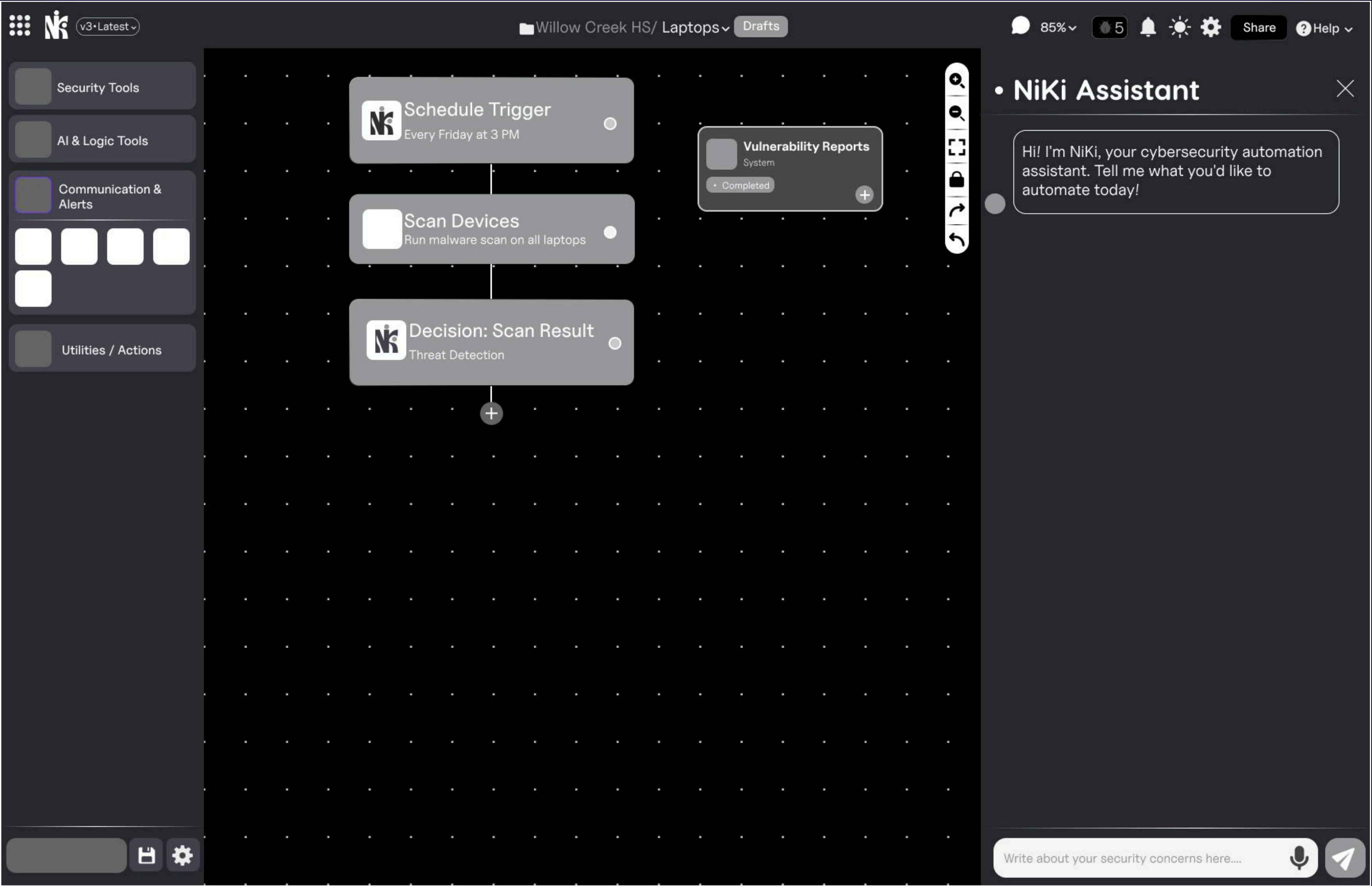


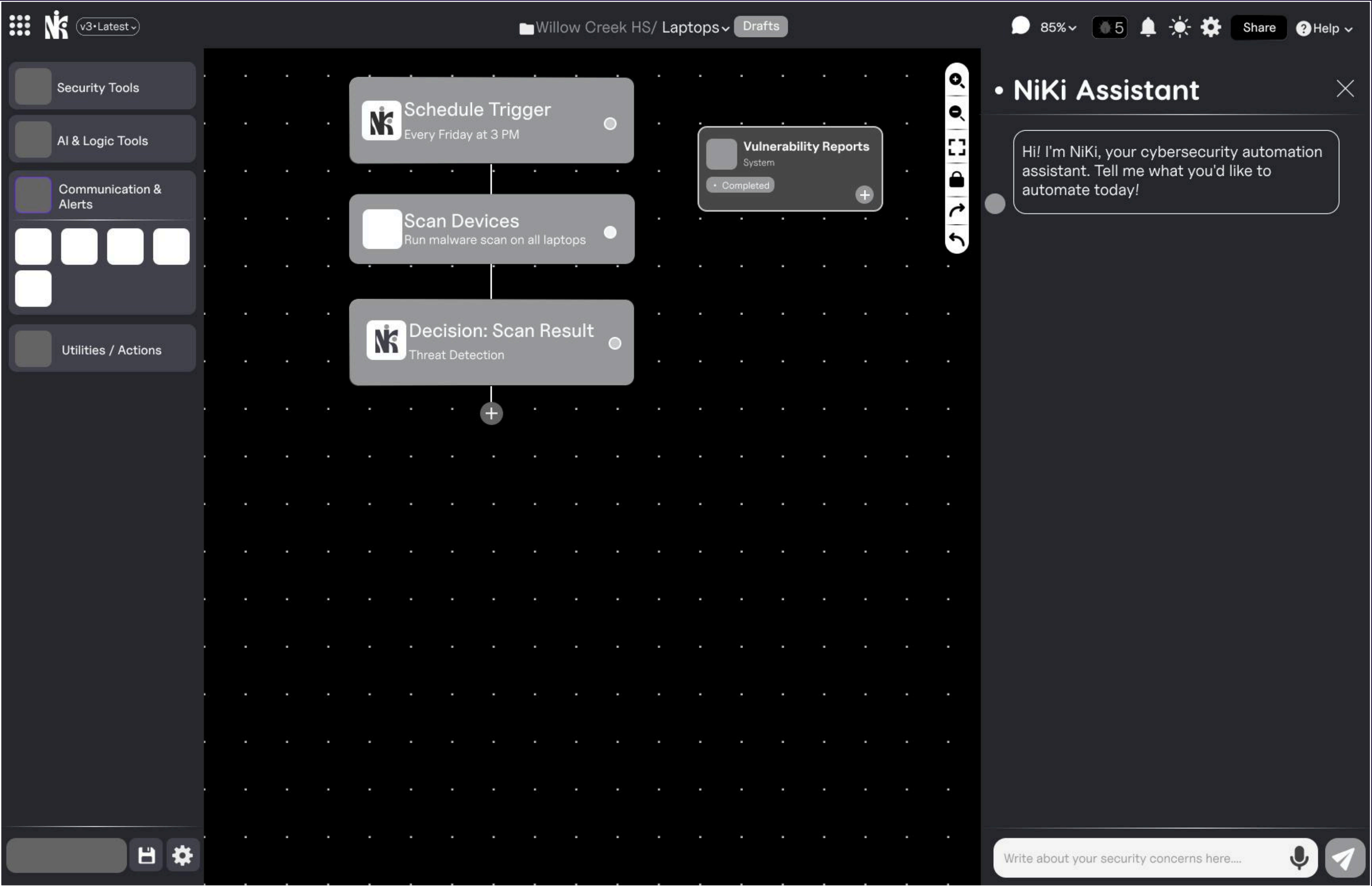


Guided Workflow ease

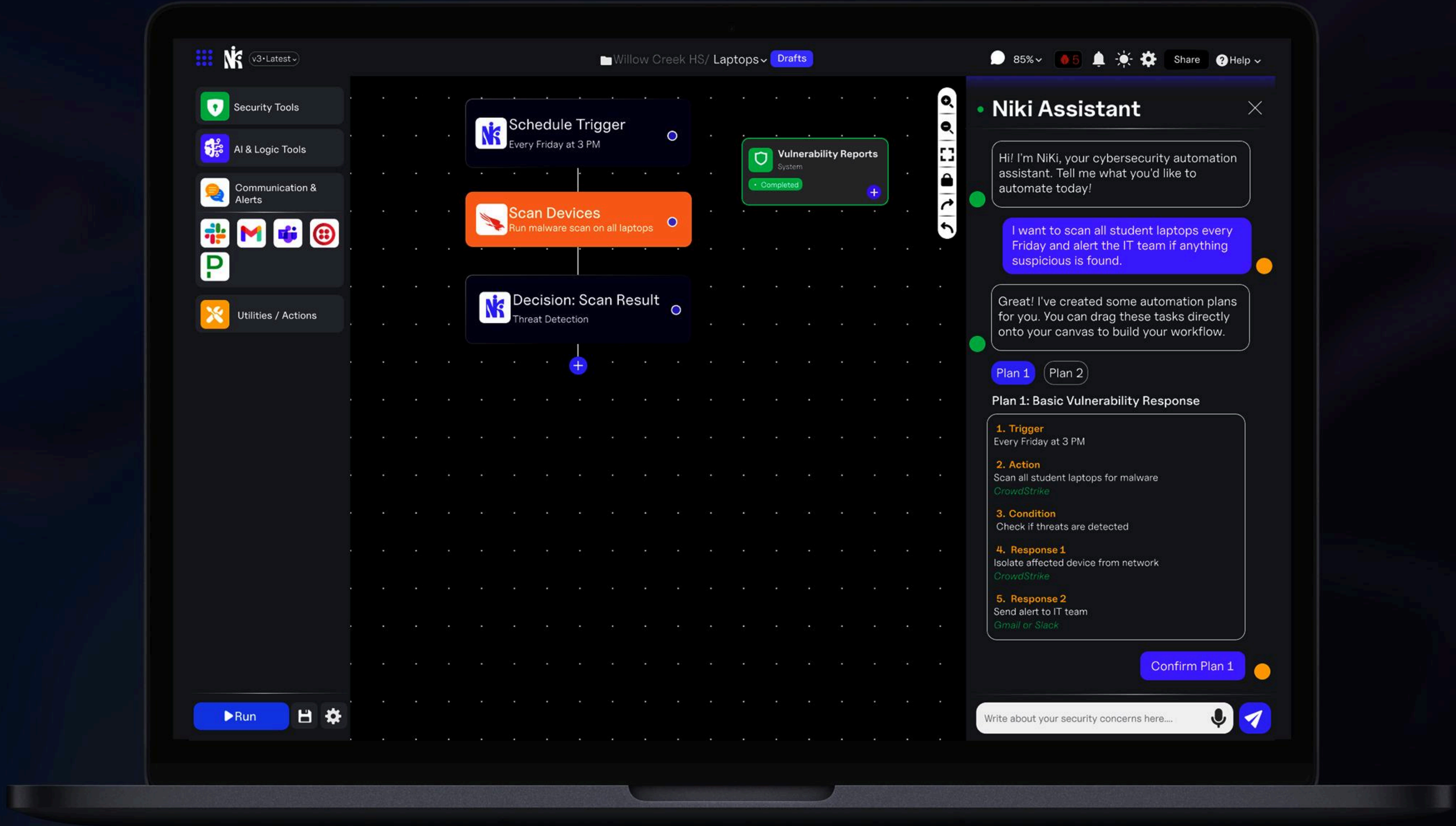


Constant Feedack
for the user for each
& every step





Basic Wireframe Structure



Workflow Builder Canvas

Features

Ability to disconnect the nodes

always an option for expert users as well



→ Easily confirm the selected plan

Design Features

Node Categories
Organized by function for easy access

Security Tools

AI & Logic Tools

Communication & Alerts

Utilities / Actions

Run

Save

Settings

Willow Creek HS/ Laptops

Drafts

85%

5

Share

Help

Schedule Trigger

Every Friday at 3 PM

Scan Devices

Run malware scan on all laptops

Decision: Scan Result

Threat Detection

Vulnerability Reports

System

Completed

Niki Assistant

Hi! I'm NiKi, your cybersecurity automation assistant. Tell me what you'd like to automate today!

I want to scan all student laptops every Friday and alert the IT team if anything suspicious is found.

Great! I've created some automation plans for you. You can drag these tasks directly onto your canvas to build your workflow.

Plan 1 Plan 2

Plan 1: Basic Vulnerability Response

1. Trigger

Every Friday at 3 PM

2. Action

Scan all student laptops for malware

CrowdStrike

3. Condition

Check if threats are detected

4. Response 1

Isolate affected device from network

CrowdStrike

5. Response 2

Send alert to IT team

Gmail or Slack

Confirm Plan 1

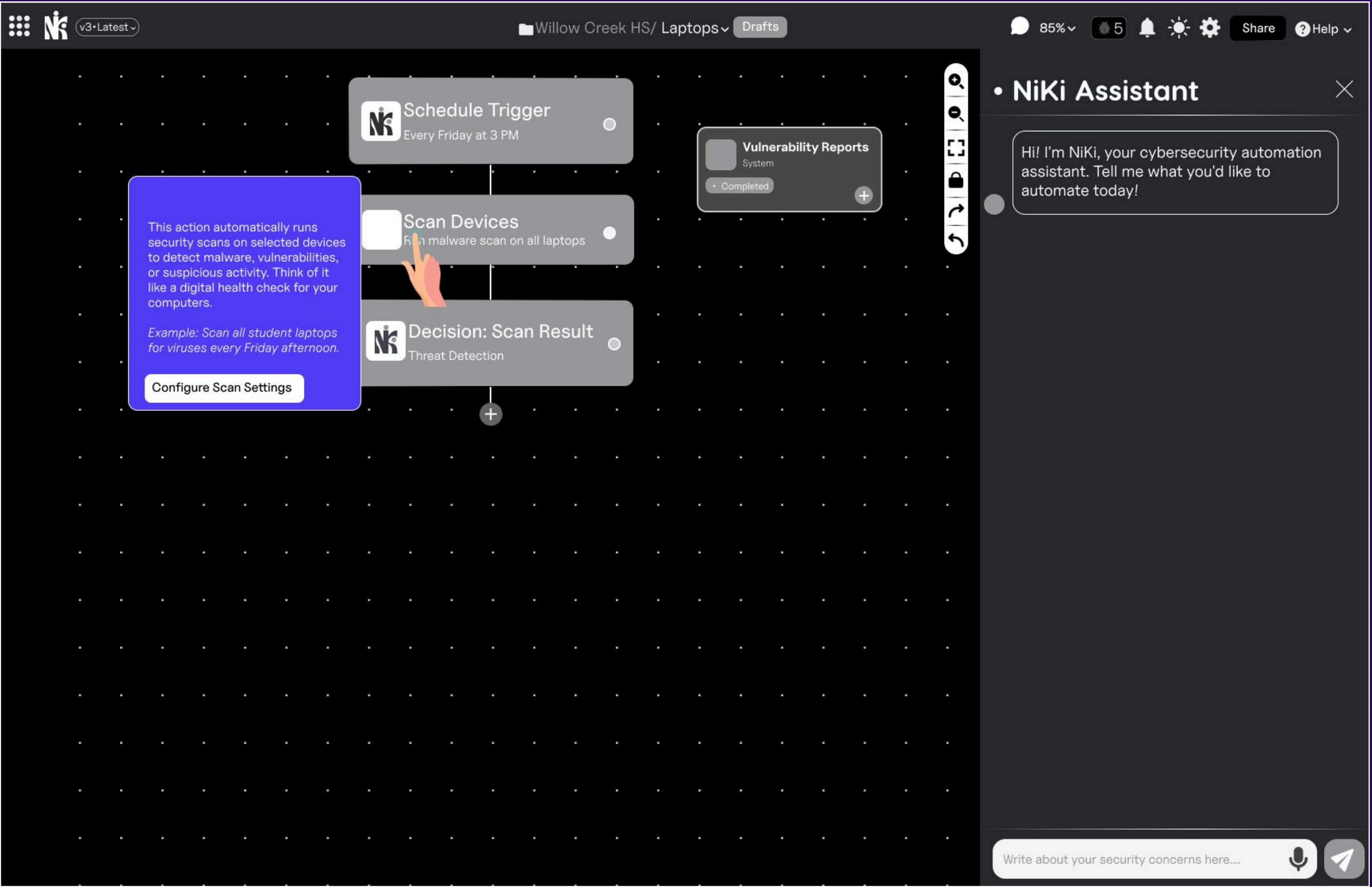
Write about your security concerns here....

Assistant Toggle

Smart Hover Tooltips with Quick Actions

Nodes display rich tooltips on hover with plain-language explanations, examples, and quick configuration options. Perfect for non-experts who need immediate context without leaving their workflow.

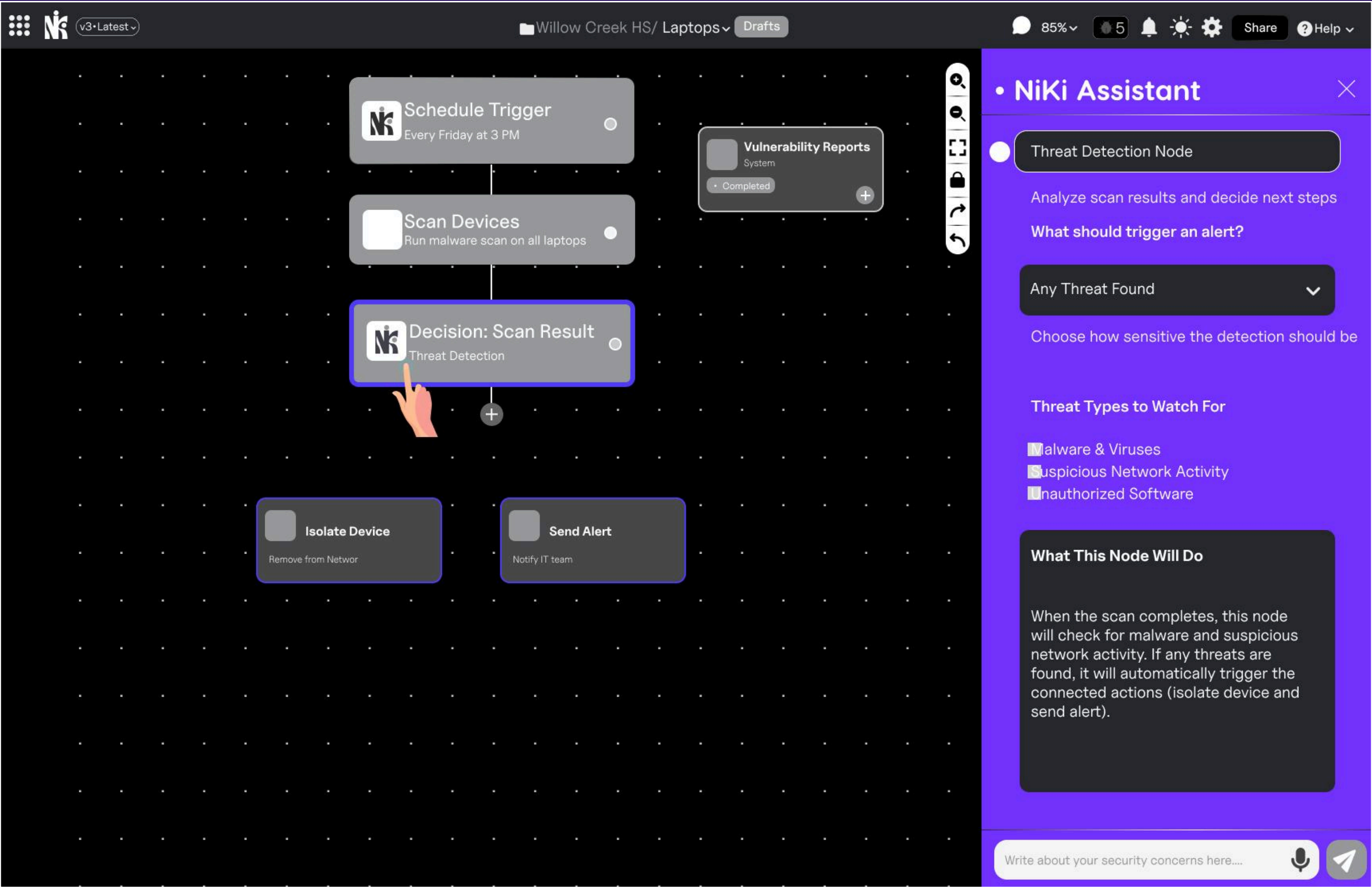
Node Explanation/Configuration



Contextual Side Panel with Live Preview

When a node is selected, a detailed side panel opens with configuration options, plain-language explanations, and a live preview of what the node will do. Great for detailed setup without cluttering the canvas.

Node Explanation/Configuration

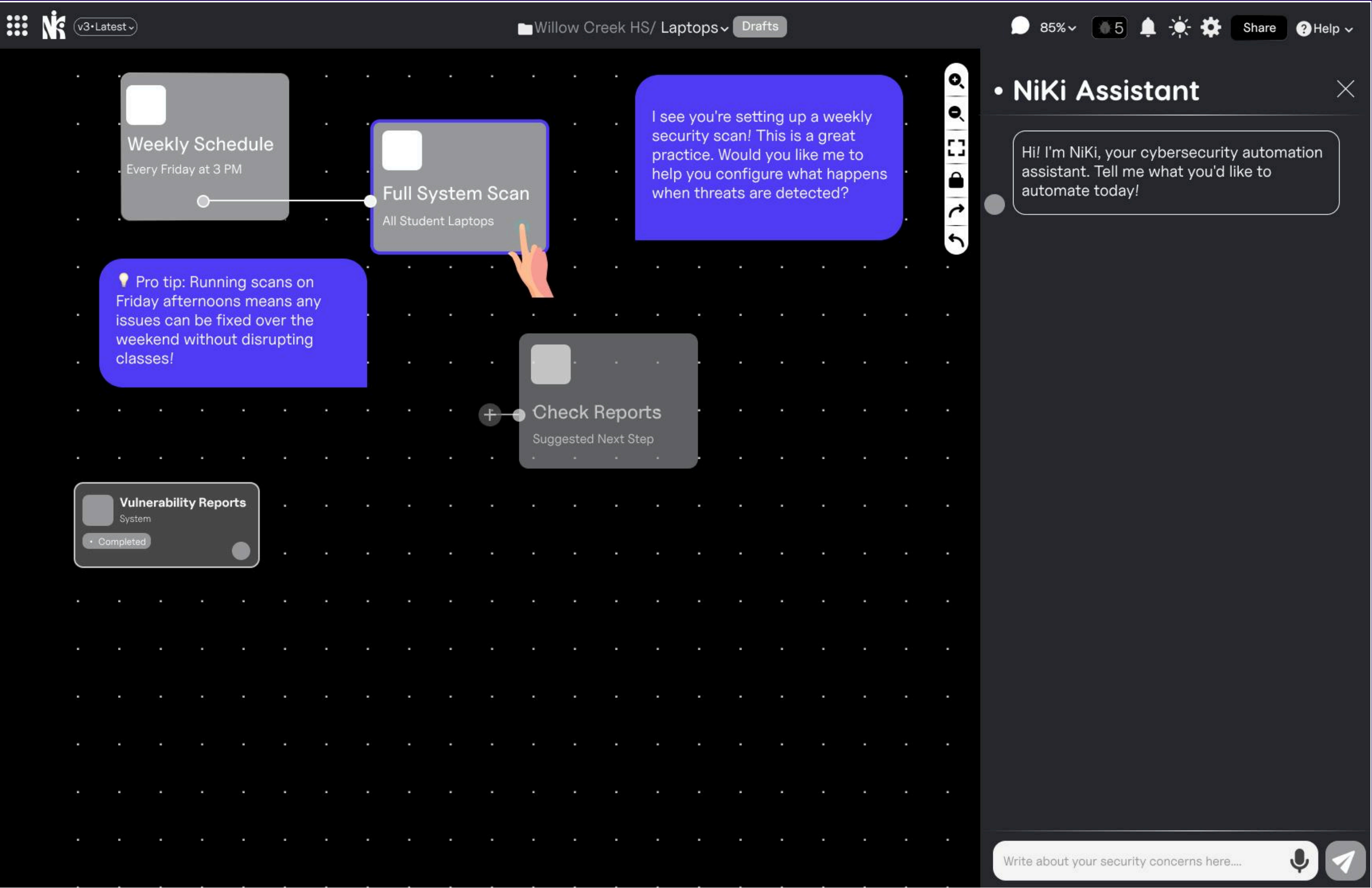


When users encounter new concepts like "threat detection," they see brief, interactive explanations with visual examples. The AI assistant proactively offers help: "This is your first time setting up threat scanning would you like me to explain how it works?" This approach respects users' time while building knowledge incrementally.

AI Assistant Contextual Help

The NiKi assistant provides contextual explanations and suggestions directly on the canvas. Users can ask questions about specific nodes and get personalized help based on their workflow context.

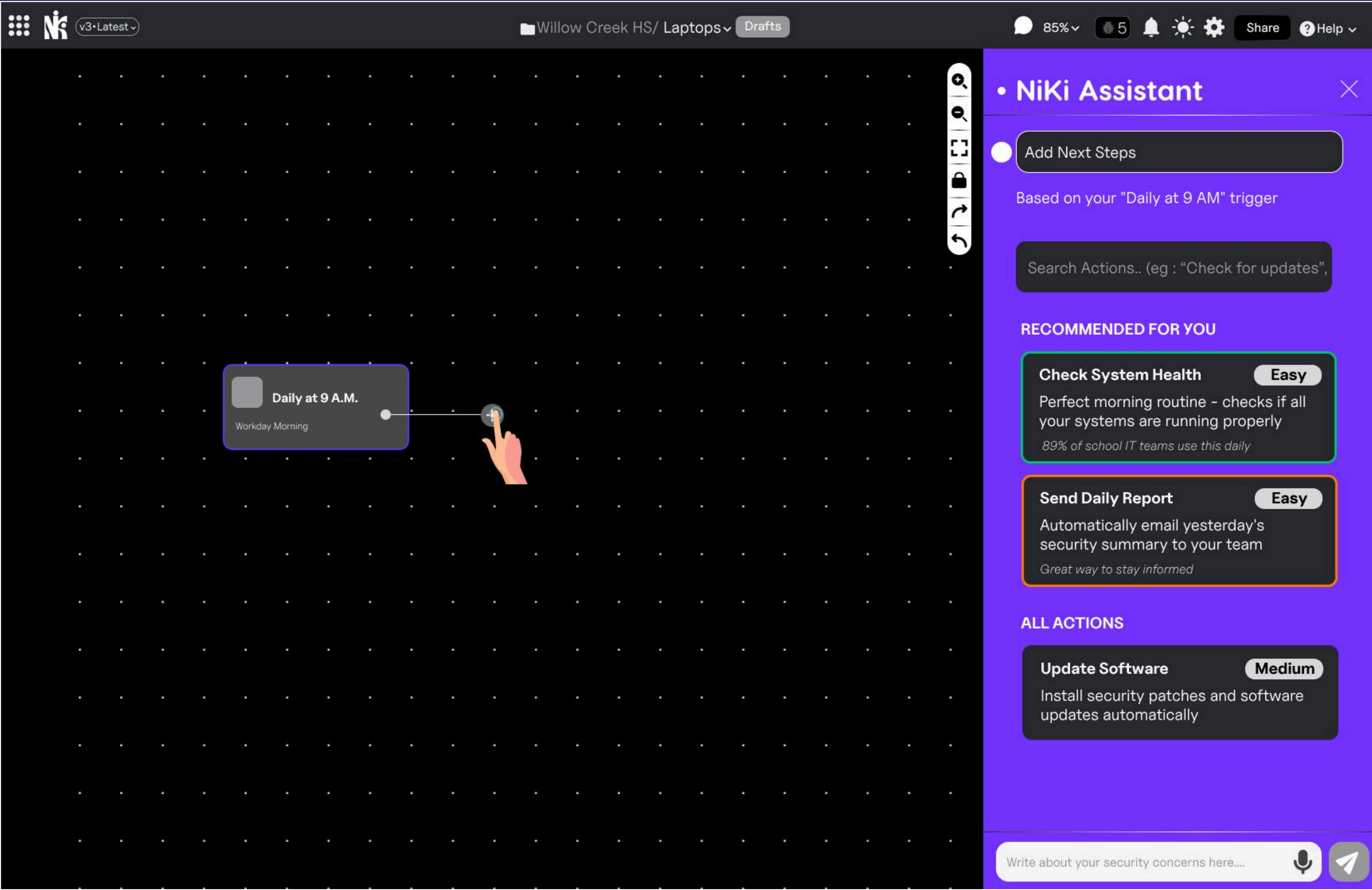
Node Explanation/Configuration



Smart Node Library with Contextual Suggestions

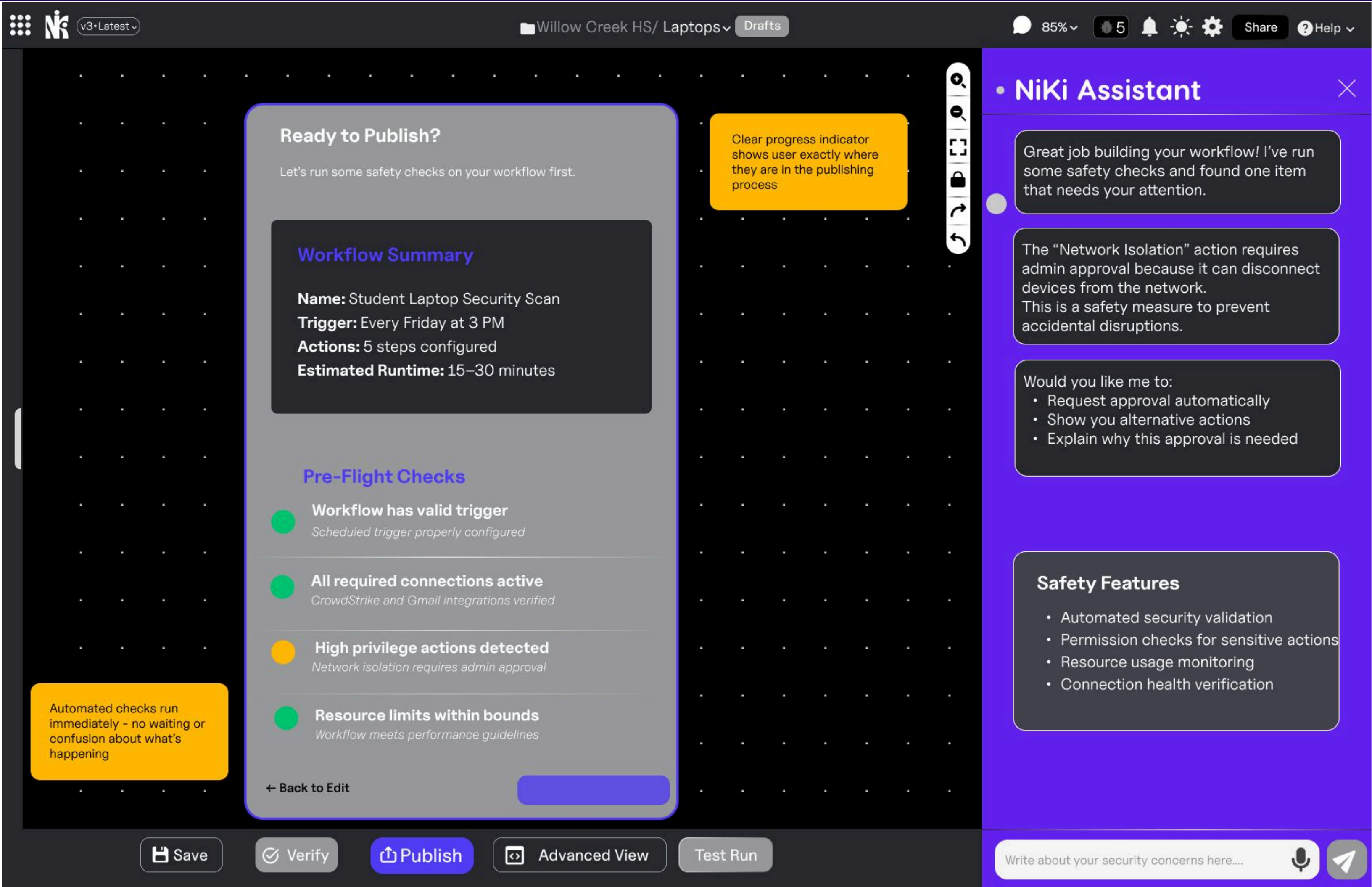
A searchable node library that suggests relevant nodes based on workflow context. Each node shows clear explanations, common use cases, and difficulty level to help non-experts make informed choices.

Node Explanation/Configuration



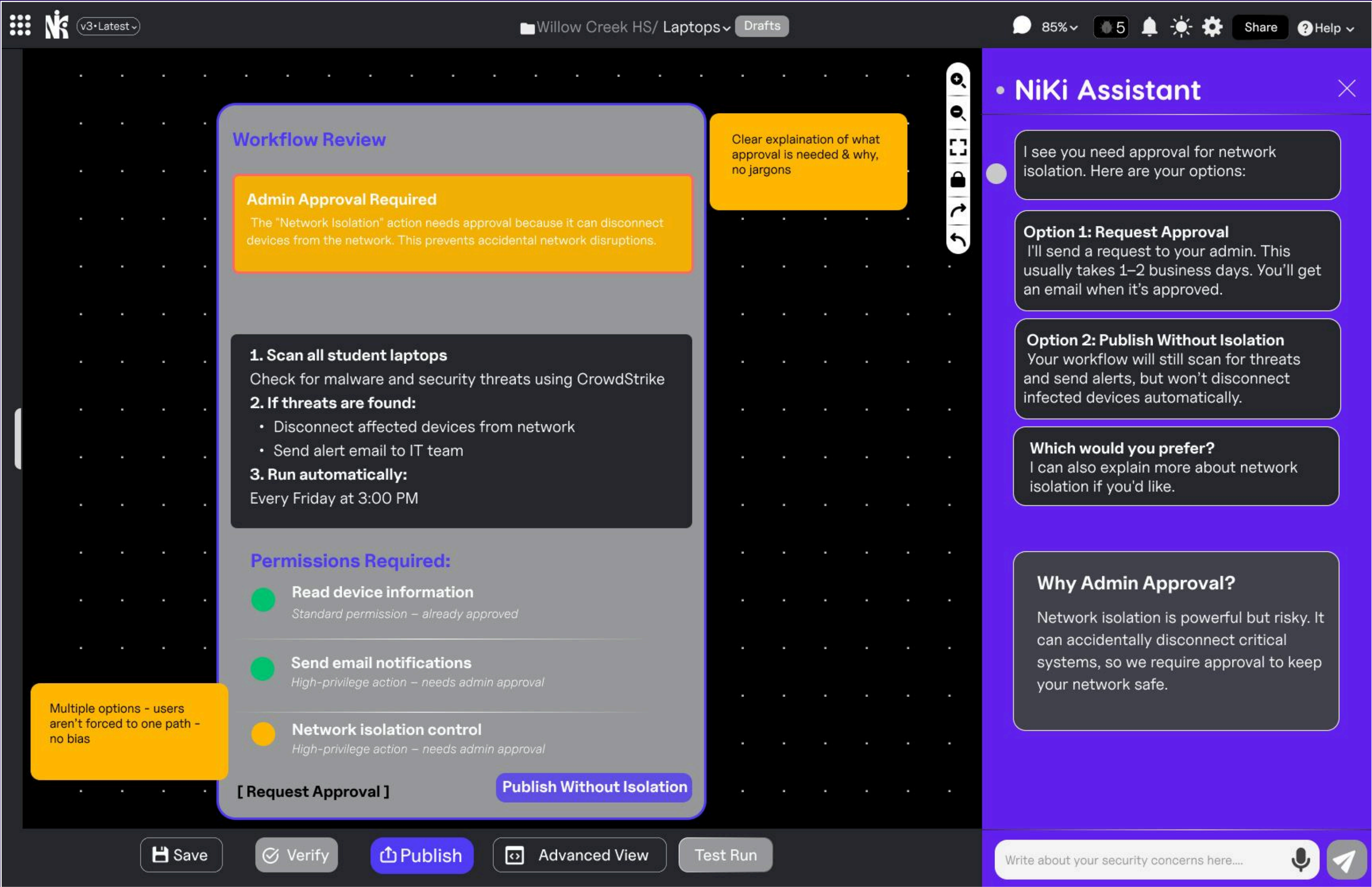
Pre-Publish Validation Screen

Automated Checks and user review before Publishing



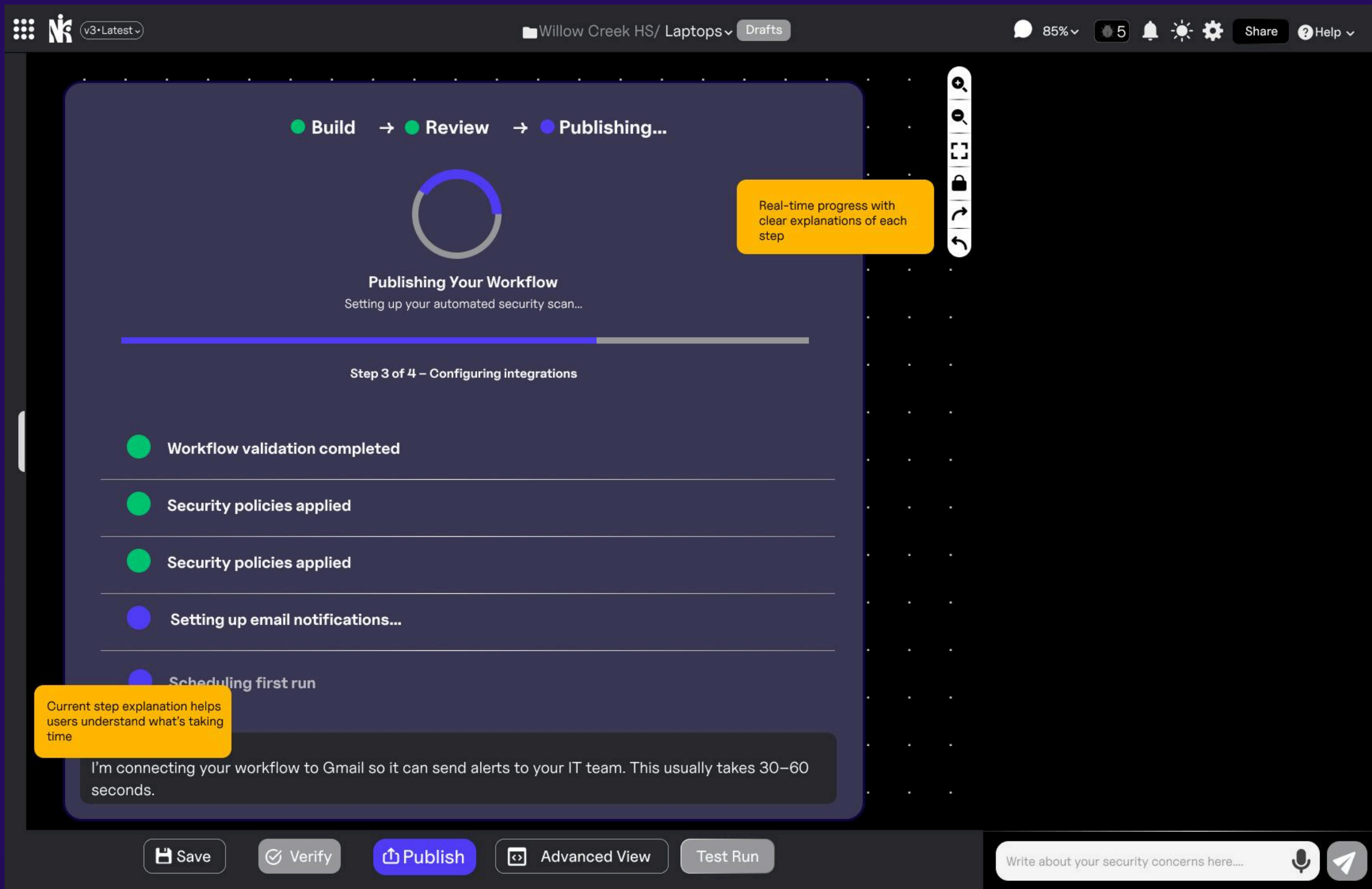
Detailed Review & Approval

Step by Step workflow review ith plain english instructions



Publishing Progress

Real-time feedback during the publishing process



MICROCOPY/HELP ELEMENTS

When two nodes can't connect

"Oops! These two steps can't connect directly. Try adding a decision step in between, or check if you need a different type of action here. Need help? Ask NiKi!"

Node Tooltips & Help Bubbles

Auto-Fix
This step tries to automatically solve problems it finds. It's like having a maintenance person who can fix common issues without bothering anyone – but it'll ask for help with the tricky stuff!

Publish Confirmation Dialog

Great work! Your workflow is ready to go live and start protecting your systems automatically.

DESIGN PRINCIPLES & CHALLENGES

The Non-Expert Challenge Landscape

Building cybersecurity tools for non-experts means navigating a perfect storm of user anxiety, technical complexity, and high-stakes consequences. Users often approach security automation with fear worried they'll "break something" or inadvertently create vulnerabilities.

Core UX Challenges

Avoiding Tech Jargon Without Oversimplification

The challenge isn't just removing technical terms, it's translating complex cybersecurity concepts into language that preserves meaning while remaining accessible. Terms like "network isolation" need to become "temporarily disconnect devices from the network" with clear explanations of why and when this happens.

Preventing and Gently Correcting Mistakes

Non-experts often don't know what they don't know. They might configure workflows that seem logical but could overwhelm systems or create security gaps. The interface must anticipate these mistakes and guide users toward safer configurations without making them feel incompetent.

Building User Confidence in High-Stakes Environments

Cybersecurity feels inherently risky to non-experts. Every action carries potential consequences for network security, user privacy, or system availability. Users need constant reassurance that they're making good choices and that mistakes can be undone.

Handling Incomplete or Incorrect Workflows

Users often abandon partially completed workflows when they encounter confusion or complexity.

Creating a "Can't Break It" Environment

Perhaps the greatest challenge is overcoming the fear of experimentation. Non-experts learn by trying things, but cybersecurity tools traditionally punish exploration. Users need to feel safe testing ideas and making changes.

Design Solutions & Strategic Approaches

Progressive Tutorial Integration

Rather than front-loading training, NiKi integrates contextual tutorials throughout the workflow building process.

Intelligent Progressive Disclosure

The interface reveals complexity gradually, starting with simple, template-based workflows before exposing advanced options.

Reassuring Feedback Architecture

Every action receives immediate, positive feedback. Instead of technical confirmations like "Webhook configured," users see human-friendly messages: "Great! I'll send alerts to your IT team when threats are found." The system celebrates small wins and uses encouraging language that builds momentum.

Comprehensive Undo Philosophy

NiKi implements multiple layers of reversibility. Users can undo individual actions, revert to previous workflow versions, or temporarily disable workflows without losing configuration.

Conversational Microcopy Strategy

All interface text adopts a collaborative, supportive tone. Instead of "Error: Invalid configuration," users see "I noticed something that might cause issues—let's fix it together." Button labels use action-oriented language: "Help me set this up" instead of "Configure."

Visual Clarity Through Metaphor

Complex cybersecurity concepts become accessible through familiar metaphors. Network isolation is visualized as disconnecting a cable, not through abstract network diagrams

Adaptive Assistance Intelligence

The AI assistant learns from user behavior and proactively offers help. If a user hovers over an element repeatedly, the assistant explains it. If workflow creation stalls, it suggests next steps. When users seem confused (clicking randomly, long pauses), the assistant intervenes gently: "I notice you might be looking for something how can I help?" This creates a safety net that activates based on user signals rather than assuming incompetence.

Thank You
