NGRAIN® VIRTUAL INDEX (VI)

ACCELERATE ACCESS TO EQUIPMENT RESOURCES AND SUPPORT SYSTEMS

Based on NGRAIN commercial-off-the-shelf software, the NGRAIN Virtual Index (VI) is a customized application that leverages 3D Knowledge Objects (3KOs™)—or 3D equipment simulations—to expedite access to equipment information.

KEY BENEFITS

PROVIDE INSTANT ACCESS TO KEY RESOURCES

VIs expedite access to equipment reference materials via interactive links from 3D equipment parts to documents, Web pages, multimedia files, and maintenance and support systems. With VIs, multiple links can be associated with each 3D part, enabling the quick and accurate location of the right information at the right time.

FACILITATE TECHNICAL BRIEFINGS AND DISCUSSIONS

VIs deliver a comprehensive, fully interactive overview of complex systems and sub-systems. From aircraft to land to marine systems, VIs allow non-technical personnel to understand sub-system location and function quickly.

BRING NEW TEAM MEMBERS UP TO SPEED

Whether distributed by USB key, CD-ROM, or over the Web, VIs provide an informative welcome kit, ensuring new team members—from engineers to administration to management—are quickly ramped up with the information they need to perform their jobs most effectively.

> "An independent study found that the NGRAIN Virtual Index—acting as a front-end interface to a Life Cycle Maintenance System—reduces the work hours required to resolve a maintenance incident by 30 percent."

PRODUCT FEATURES

EQUIPMENT ORIENTATION

FREE EXPLORATION

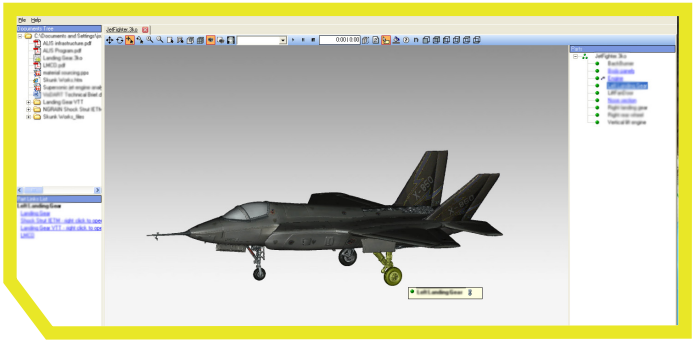
Personnel familiarize themselves with equipment by freely exploring a 3D equipment simulation. Interactions include viewing part information and rotating, moving, and cross-sectioning the equipment and its parts in real time.

SUB-SYSTEM VIEWS

Personnel can view internal sub-systems in the context of a transparent assembly, and in X-ray or line drawing mode. With VIs, personnel can navigate a hierarchical list of parts, and double-click parts to load the related 3D sub-system simulation.

OVERVIEW ANIMATIONS

Users can watch animations that provide an overview of the equipment and its sub-systems, including related procedures and operations. Animations can include callouts and audio, such as voice-over instructions, allowing for an efficient introduction to any complex equipment.



WHY NGRAIN?

NGRAIN makes 3D attainable, while delivering unparalleled real-time virtual hands-on interaction with 3D equipment simulations. With NGRAIN, SMEs can easily update, integrate, and distribute 3D simulations, sending them over the Web to everyday desktop, laptop, and tablet computers. NGRAIN solutions are proven to accelerate training and improve first-time-right performance, transforming novices into experts.

For more information on how the military is using NGRAIN to improve training and optimize operations, contact NGRAIN at info@ngrain.com or download a copy of the Report on Military Use of NGRAIN in Training and Operations at www.ngrain.com/3Dreport.

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PRODUCT FEATURES

RESOURCE ACCESS

MULTIPLE LINKS

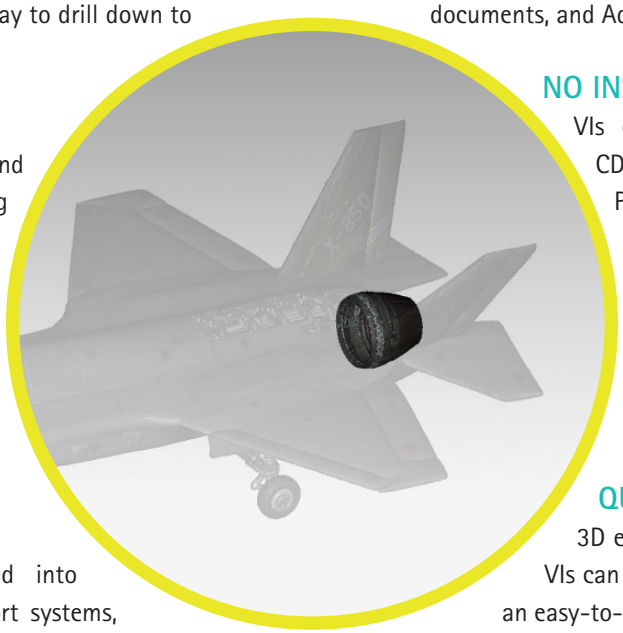
With VIs, multiple links can be placed on each part in the 3D equipment simulation, quickly connecting personnel with the associated information. Whether linking to other 3D simulations (such as Virtual Task Trainers), technical documentation, multimedia files, Web pages, or third-party systems, VIs provide a streamlined way to drill down to critical equipment resources.

PART LOCATION

Personnel can quickly locate parts and their function, either by navigating the hierarchical parts list or the 3D equipment simulation itself. The result is reduced errors in identification and selection of parts, and accelerated location and comprehension of related information.

THIRD-PARTY INTEGRATION

Optionally, VIs can be integrated into third-party maintenance and support systems, providing a visual front-end interface that streamlines workflow and reduces errors in accessing information. With NGRAIN's extensive Application Programming Interface (API), VIs can become an integrated part of existing systems.



QUICK DEPLOYMENT

RAPID DEVELOPMENT

Based on NGRAIN commercial-off-the-shelf software, VIs can be quickly configured to meet an organization's specific requirements. 3D equipment simulations used in VIs can be reused in other applications, such as Virtual Task Trainers, Microsoft® PowerPoint® presentations, Microsoft® Word® documents, and Adobe® PDF files.

NO INSTALLATION

VIs can be deployed to personnel by CD-ROM, USB key, or the Internet. Personnel can run VIs instantly, without performing any installation. VIs do not require administrator rights to play, leave no footprint on computers, and conform to the US Department of Defense Mobile Code policy.

QUICK UPDATE

3D equipment simulations delivered with VIs can be updated with NGRAIN® Producer, an easy-to-use software tool that allows Subject Matter Experts (SMEs)—with fewer than two days of training—to create and update links, 3D animations, and part information. As links change or a resource base expands, SMEs can update the VI content in minutes.

Figure 01 & 02. (Front/Left) | NGRAIN Virtual Index (VI)
Students can view internal parts.

MINIMUM SYSTEM REQUIREMENTS

Computers must have the following or higher:
- Microsoft® Windows® 2000 SP4, Windows® XP Professional SP1a, Windows® XP Tablet PC Edition SP1, or Windows® Vista™
- Microsoft® Internet Explorer 6.0 SP1
- Microsoft®DirectX® 8.1
- Microsoft® .NET Framework 2.0
- 800 x 600 screen area (1024x768 is recommended)
- 16- or 32-bit color depth

Performance is related to computer processor speed and memory and to the complexity of the 3D model. 128 MB of RAM and a 700 MHz processor is the minimum; however, 512 MB of RAM and a 1.4 GHz processor is recommended. Performance will be improved most by adding additional RAM.