HD3D Visual Reporting

Maximizing your PLM investment – merging PLM Visual Analytics into the 3D design process

Benefits

- Transforms your wide range of company information into effective decision making within the 3D product development environment
- Correlates information from multiple disjointed data sources into a single visual interactive environment that delivers product analytics directly to your design teams
- Alleviates the process of navigation through large product structures, numerous component relationships and long query results, working seamlessly with NX assembly tools
- Shortens the process of information consumption and interpretation, and ultimately boosts productive information analysis and understanding

Summary

Product and process data have traditionally been presented to the user within a collection of methods (indented tree lists, reports and charts), requiring the user to examine key business and program data separately from its associated 3D representation. NX™ HD3D Visual Reporting software blends information of interest from your company's data sources directly into the 3D product design environment. This helps users make easier unambiguous assessments, interpret information more accurately and synthesize product and process data rapidly into correct design decisions.

Meeting business challenges

Your company is continually challenged to reduce development costs, improve productivity and increase quality. And to facilitate your tight design cycles, your design teams rely on the latest company data to oversee progress, manage risks, resolve impacts and ultimately formulate hundreds of needed design decisions. In today's data-rich environment – where prolific amounts of data are everywhere – information processing, data correlation and decision synthesis are key bottlenecks that your design teams face. HD3D Visual Reporting allows design teams to instantly gather requested company



HD3D Visual Reporting provides 3D analytics from company data sources to improve decision-making.

NX



HD3D Visual Reporting

Features

- Out-of-the-box Visual Reports provide users with answers to commonly asked questions
- Customizable reports allow your users to build specialized reports to support your processes
- Users browse report results using a variety of innovative 3D display and navigation techniques
- Report display can include custom bitmaps for tags, custom design layout of information tables and a choice of what information is displayed in tool tips
- Engineers leverage NX properties to best understand overall design and locate issues
- Managers leverage
 Teamcenter information to determine the overall state of the project
- Organizations leverage Teamcenter by distributing essential Visual Reports across the enterprise

information and visualize its impact directly within the context of the 3D design. Design teams using HD3D Visual Reporting gain a unique level of insight, with sharper degrees of understanding, and are swifter to make the right decisions at the right time.



HD3D Visual Reporting leverages your wide range of company information for key design decision support.

HD3D Visual Reporting value for your business

HD3D Visual Reporting is a toolset that provides effective product analytics for your design teams.

Visual PLM – Comprehending the big picture with intuitive 3D presentation and 3D navigation of your company data. HD3D Visual Reporting correlates information from multiple disjointed data sources into a single visual interactive environment.



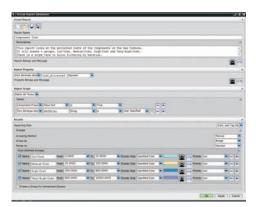
Multi-dimensional reports color code objects for one report property and display tags for other properties.

Information drilldown – Immediately accessing information details using onscreen browsing and interactive tagging. In addition, new innovative display techniques help put users in the right context and alleviate the process of navigating through product structures having large numbers of component relationships.

Decision support – Bringing decision support tools to the product development environment. HD3D Visual Reporting enables everyone in the design team to visually process the information they need, and to continually advance product designs in a more intuitive, approachable and productive way.

Visual Reports: Out-of-the-box or custom-made

HD3D Visual Reporting comes with a set of predefined, out-of-the-box reports that provide your design teams with answers to a series of commonly asked questions. Reports related to ownership, check out, part maturity, projects, load status, validation status and more are available for instant use. You can also create multidimensional reports that include more than one top-level report property, enabling you to color code objects by one property and display visual tags for other properties for richer visual feedback – for example, color code parts by tooling status while displaying tags on the parts for completion schedule. You can switch among the top-level report properties in order to group and sort reported data in different ways.



Access any report and dynamically modify its input criteria as desired on the fly.



Select standard or custom bitmap tags to clearly convey information.

Predefined reports from Teamcenter® 9
Report Builder convey information on parts affected by change orders, change requests or problem reports; part status in change process or workflow; and components with higher revision levels. You can create additional reports with Teamcenter 9 Report Builder to gather and report other data of interest from Teamcenter or external data sources.

Out-of-the-box Visual Reports, together with the Visual Reports definition dialog and layout templates, provide powerful tools for creating your own set of custom reports for use company-wide. You can modify as needed the input criteria of any Visual Report to generate reports on the fly, or build reports from templates that include custom tag icons, tool tips and results detail dialog boxes. In userspecified report entry fields, lists of valid values are available in drop-down lists, and type-in completion accelerates text field input. In the managed environment, you can store your Visual Reports in the Teamcenter® software platform.

HD3D innovative display and interaction techniques

New HD3D display and interaction techniques aid the user in interpreting and navigating results within product structures of all sizes. Visual Report activation results in a conditional formatting, or color coding, of the assembly according to the particular data criteria under examination. The color coding remains in force for as long as the report is activated, allowing the user to work on objects of interest without losing focus on the report results.

The legend in the Visual Reporting dialog box lets you both interpret results and perform actions on groups of components that are displayed within the same group (color). Multiple 'see-through' settings give the user various methods for removing complexity of the model and instantly seeing the components of interest. Selective focus and data rollup support the user when navigating up and down the product structure. Additional information details are easily accessed by clicking on interactive tags using Info Views. Info Views display chosen information and can directly open other associated documents. Finally, output options allow you to export Visual Report results to other formats for use outside the NX session.



Innovative HD3D display techniques let users examine your company data within product contexts.

Your company's data is HD3D ready now HD3D Visual Reporting works on all your existing company data, all your existing NX assembly designs and with all your existing NX and Teamcenter metadata. Most metadata that is automatically created during an NX or Teamcenter session is instantly available as a report property. Metadata can also be manually added as user-specified attribute data. There is no need to create new data formats. Users can immediately set up and edit Visual Reports based on key product and process criteria, and apply those reports onto any assembly in the NX session. Visual Reporting is applicable to all industry sectors and for all customer roles. And it's relevant from design inception through manufacturing to field maintenance. You are HD3D ready and enabled now!

Key capabilities

- Create Visual Reports that correlate and integrate results from multiple data sources
- Apply ready-made Visual Reports for use out-of-the-box
- Define custom Visual Reports for your specific needs
- Report on component properties using automatically created NX-specific metadata (load states, weight, material, assembly position status etc.)
- Report on properties stored in custom metadata created by user-defined attributes
- Report on properties from a wideranging set of Teamcenter and other PLM data
- Report on properties from custom server side reports in Teamcenter, allowing access to server side calculations and external data sources.

- Dynamically modify report input criteria to generate reports on the fly
- Specify the groups that appear in the legend area
- Conditionally format, or color code, report results directly using the 3D design
- Perform actions on a resulting group of components (same color)
- New display and navigation techniques: see-through, data rollup, selective focus
- New information drilldown techniques: detailed dialogs, interactive tags
- Use custom tags to personalize or adopt company standards and logos into the report results
- Choose any additional metadata available to display in a custom information view layout or balloon tip display
- Create a report-specific custom info view layout
- Use component groups to display logical subsystems regardless of BOM structure
- Store Visual Reports in Teamcenter and distribute across the enterprise
- Optional output to other formats including HTML or Excel

Contact

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