



Tideway Foundation™ 7.2

Search for the Data Center

Today's Fortune 1000 organizations rely upon their IT infrastructure to run all aspects of their business. IT architectures are rapidly becoming more complex and interconnected, resulting in an explosion of ever-changing dependencies in the run-time environments. This has led to a proliferation of unnecessary hardware, virtual machines and software – meaning higher costs. It also makes critical data center migration and consolidation projects hard to plan and risky to execute.

Today's tools and techniques – traditional asset and inventory management, spreadsheets, and the collective knowledge of the team can't cope with the pace of change. A new approach to IT service management is necessary. Tideway's Automated Application Dependency Mapping solution – Foundation - is at the forefront of providing support for the ever-changing IT infrastructure.

Tideway Foundation is the most widely deployed Application Dependency Mapping solution in the market – providing a complete topology of applications and the underlying IT infrastructure, including how they support critical business processes.

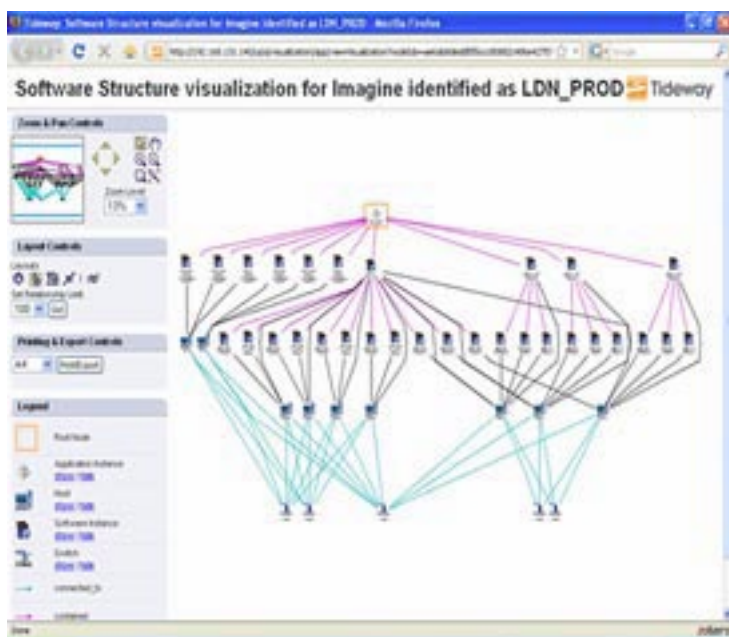
Tideway Foundation delivers a reliable and up-to-date single source of truth about your business applications, infrastructure and the critical dependencies between them. Tideway Foundation's non-stop discovery

techniques cut across previously disparate silos of configuration information, automatically populating and maintaining a data store of Configuration Item (CI) and dependency information.

Tideway Foundation provides browser-based access to flexible dashboards, drill-down reports, graphical visualizations and, of course, search through its task-specific IT Portal. Stand alone, Tideway Foundation is the cornerstone to effective planning and execution of data center projects. When integrated with other commercial or in-house enterprise service management tools, Foundation is core to implementing IT best practice frameworks such as ITIL® and initiatives such as Business Service Management (BSM) and Configuration Management Databases (CMDBs).

Need the 360 degree view of your IT infrastructure?

Tideway Foundation's data center discovery provides the broadest possible coverage of the IT environment. Solutions based on proprietary agents are inherently limited by their ability to understand only the hosts on which they have been deployed. To address this limitation, Tideway Foundation has pioneered the development of true, multi-platform agent-free data center indexing combined with reconciliation of third party data sources.



What's New in Foundation 7.2?

- **Hardware Reference Data** – power consumption, heat output and rack space requirements are recorded against discovered servers helping to optimize power and space.
- **End of Life Data** – end of life dates are recorded against common operating systems and software, helping to keep the infrastructure risk-free
- **Dynamic Discovery Extensions** – a plug-in architecture that makes it easy to add new discovery techniques.
- **Database Discovery** – based on the Dynamic Discovery Extensions architecture – a plug-in that lets you understand dependencies on databases and tables, and also to look up contextual data for any CI.
- **Data Consolidation** – data from multiple appliances can be consolidated into a single view, making deployment easier in firewalled environments and increasing speed of discovery in large estates.

Need results fast?

Tideway Foundation ships with a wide variety of pre-populated patterns, enabling it to recognize the most common hardware types, operating systems, software products, editions and versions directly out-of-the-box. It also provides contextual information – such as hardware characteristics – heat output and power consumption, and operating system and software end-of-life dates. Additional patterns are added monthly via the Tideway Knowledge Update service, ensuring recognition of new common software products with no effort on your part.

Tideway Foundation is provided as a system of one or more appliances, designed for rapid deployment and requiring minimal setup – speeding time to value. Typically results can be delivered in a matter of days. Tideway also provides a packaged service giving you actionable results in 30 days.

Trying to manage virtualization and clustering complexity?

Virtualization and clustering technologies are revolutionizing the data center, yet the additional layers of abstraction introduced can add significant management complexity. Tideway Foundation automatically identifies instances of virtual machines, their dependencies on the physical infrastructure and how they support business applications. The same applies to clustered environments where application dependencies to active and inactive clustered hosts are automatically mapped.

Need to understand complex business applications?

Every business is unique – containing different application architectures and custom built components. Tideway Foundation's powerful pattern language (TPL) allows custom software and business applications to be modeled fast. Once modeled, instances are automatically identified and mapped to the discovered hardware and software infrastructure components across the enterprise. In addition, Tideway's data model can be extended to include new configuration item and relationship types.

Need to get value from existing enterprise service management tools?

Tideway Foundation enhances existing enterprise service management applications, such as service desks, asset databases, Business Service Management (BSM) tools, Configuration Management Databases (CMDB) and data center provisioning software. By populating these tools with service dependency maps, as well as change information, Tideway Foundation provides the mandatory business context to enable IT service management.



"A clear, reliable view of the entire IT environment, from the business application and user level to the infrastructure layer, is the foundation for effective IT management and the best way of meeting compliance requirements"

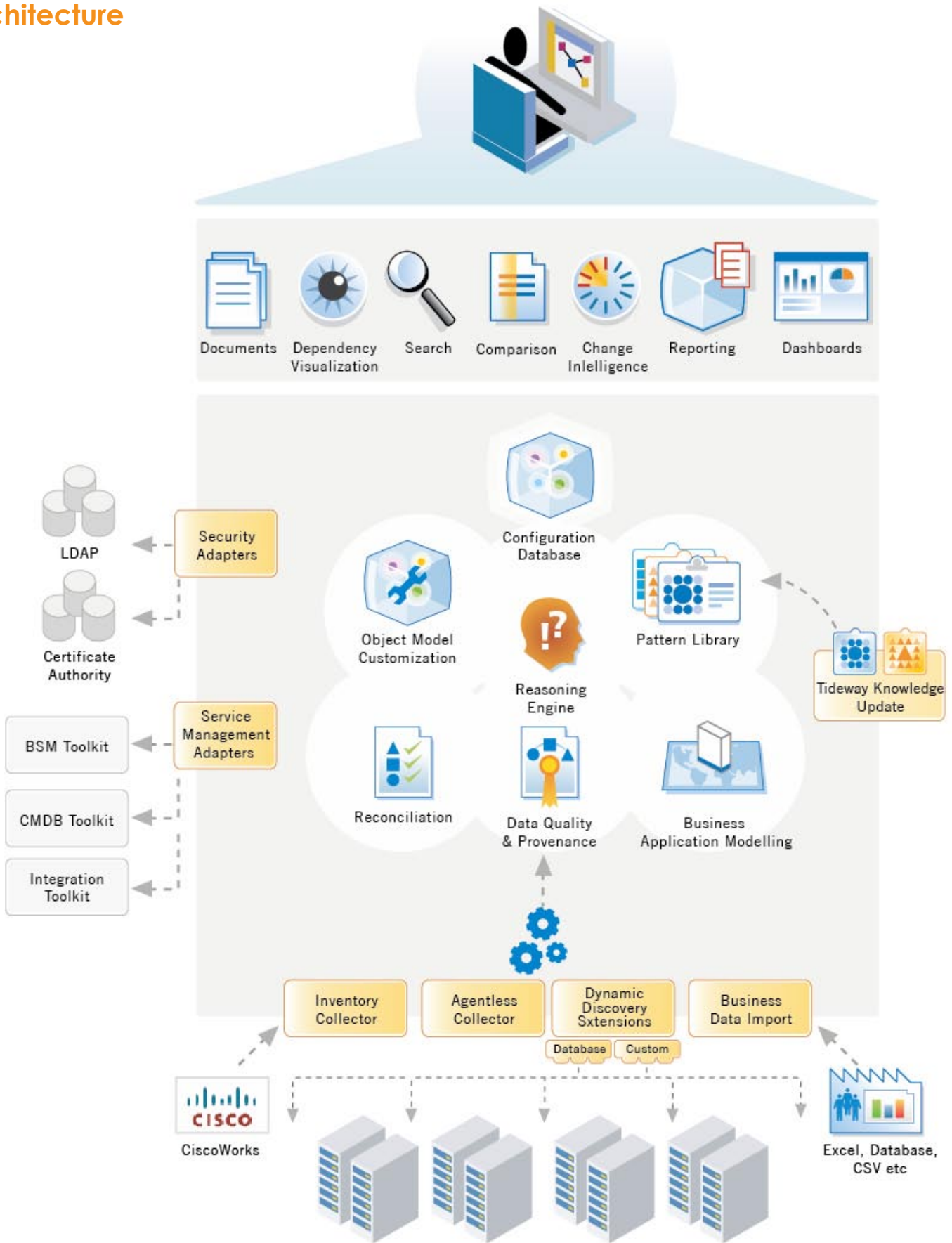
Stephen Ashton,
Global Head of IT Business Management, Dresdner Kleinwort

Total IT transparency

The transparency that Tideway Foundation creates removes the guesswork typically involved in critical IT processes. Key infrastructure reports no longer take person-months to produce, but are available on-demand. Tideway Foundation clearly identifies areas of risk within the IT environment by highlighting the dependencies between all areas of IT in a single repository.

- Cut data center hardware and software costs
- Plan data center migrations and consolidations more accurately and de-risk execution.
- Proactively eliminate avoidable causes of downtime
- Increase the pace of safe change
- Satisfy regulatory compliance requirements
- Improve Mean Time To Repair (MTTR) through faster root cause analysis
- Populate service management tools with accurate CMDB and BSM service maps

Architecture



Key Features

Discover

Foundation builds a complete topology of your applications and infrastructure including switches, servers, operating systems, software, configuration files and logs, and business applications and dependencies – and updates it as often as you need. Unlike other solutions, Foundation operates agent-free across Windows, Linux, UNIX and Netware environments. Foundation enriches discovered data with information reconciled from third-party data sources such as agent infrastructures and inventory management systems to provide a single, automated view of all IT resources in the data center.

Analyze

Foundation's unique pattern language codifies the investigative, exception handling, filtering, alerting and interpretation processes used to recognize and analyze IT components and configurations. Simple, powerful and open, the pattern language captures expert knowledge. Patterns are used to automatically interpret raw indexed data at the level of granularity that matters to you – from individual software processes to large scale distributed business applications. Foundation comes pre-populated with patterns to recognize a large number of off-the-shelf operating systems, infrastructure products and vertical applications – and adds more patterns monthly to ensure the broadest, deepest coverage of the data center.

Search

The Foundation search bar offers super-fast, free text search of the entire data store and takes you directly to the IT resource that matters most to you in seconds. Advanced search functionality lets you narrow your searches to specific object types. For power users, Foundation provides the richness of the Search Query Language. Searches are exportable in XML and CSV formats so the data can be easily shared with colleagues and other systems.

Report

Tabular reports and charts can be created in seconds to provide answers to critical questions that used to take weeks – from the simple “How many Solaris 8 servers do I have in my environment?” to the complex “What changed in the configuration of my global trading application since yesterday?”. Foundation comes pre-populated with useful reports – and also lets you create your own using the Search Query Language. Roll your favorite charts up into dashboards so you have all the metrics that matter to you at a glance.

Visualize

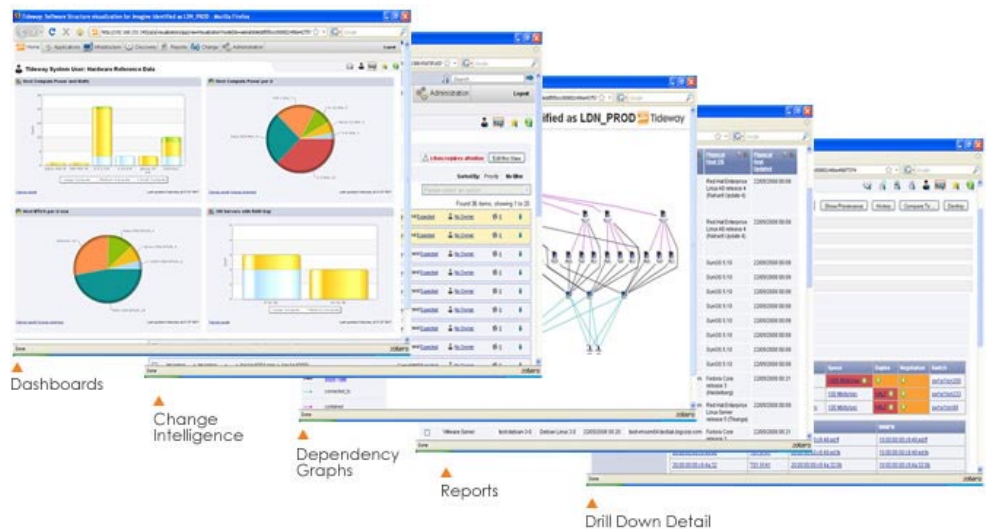
Visio is dead. Foundation automatically builds visualizations that show dependencies between switches, routers, virtual and physical hosts, processes, software packages, business applications and other business entities. Users can navigate large dependency visualizations just as they would Google Maps – by simply dragging their mouse. Print them out and take them to your change approval meetings to cut out the guesswork. This 360-degree view of application and infrastructure affords you a whole new level of productivity.

Track

Watch the changes occurring in the domains that are important to you. Whether you're interested in a specific business application, or in your VMware server estate – Foundation's 'change intelligence' tracks permitted and prohibited configurations – and highlights them directly to you. Need to know what changed and when? Foundation's comparison feature lets you compare configuration changes between any two points in time.

Collaborate

Assign ownership for every IT component - from servers to business applications. Need to build a change approval group? Find infrastructure and application owners highlighted in a change impact report. Share infrastructure views with your team, take or assign ownership of configuration issues, and stay in the loop with full investigation and issue resolution logs. Learn and benefit from the community – Foundation users share useful search queries, and patterns on Configipedia.



One Platform, Many Applications

Build a whole new way of looking at your data center with Tideway Foundation. Tideway Foundation can be extended and customised to suit your project – be it related to data center transformation, service management or compliance.

Custom Patterns

Tideway Foundation™ uses pattern matching technology to distinguish everything from the simplest running software process to the most complex business applications imaginable. Patterns are created in the open Tideway Pattern Language, or TPL. They naturally capture a sequence of discovery steps that branch intelligently according to need. Patterns are able to run commands, interrogate files and perform registry, WMI or XPath queries to obtain detailed configuration information – information which then guides subsequent steps of the discovery process. Patterns can also be used to recognise not just software and business applications, but also policies, standard/gold builds and even prohibited configurations.

Search Query Language

Tideway Foundation's Search Query Language is a high-level mechanism for retrieving data stored in the configuration database. It specifies which nodes to retrieve, and the attributes of those nodes to display. It is SQL-like for instant familiarity, only more powerful. Due to the graph-based nature of the Tideway configuration database, it is optimised for graph traversal. This makes getting to the data you require far faster than would be possible otherwise. Retrieving nested and cyclic relationships that would usually require multiple relational SQL queries, can be achieved in a single query with Foundation.

Custom Reports and Dashboards

Tideway Foundation reports are built using the Search Query Language. This makes it easy to create your own channels with the reports and charts that matter to you. The charts you create can be rolled up to create custom dashboards, and shared with your colleagues.

Dynamic Discovery Extensions

If you need to discover technologies not supported by Foundation out-of-the-box, and show interdependencies – you can build your own Dynamic Discovery Extensions. These plug in to the discovery engine, and provide new streams of discovery data to Foundation's reasoning engine. This data can then be used by patterns to recognize new node and dependency types, or to add additional metadata to existing node types. This means Foundation can discover more of your data center technologies, to whatever level of granularity you require.

Export APIs

Tideway Foundation provides open APIs to pipe the 360 degree view of your IT infrastructure into any service management application – or even into a spreadsheet. The Export API take queries written in Tideway's Search Query Language, and returns results in CSV or XML format for fast and easy manipulation.

Keeping Foundation Up-to-date

Tideway Foundation™ ships with an extensive knowledge library containing thousands of patterns with lifecycle information for a broad range of infrastructure products. However new infrastructure software is shipped every day. To ensure Tideway can always recognize the latest software in your data center, the Knowledge Update Service keeps the Knowledge Library up-to-date. Tideway works in partnership with key infrastructure vendors to constantly generate new patterns. The Tideway Knowledge Update Service provides regular updates to ensure that Foundation offers the broadest coverage for data center modeling and discovery. In version 7.2, Foundation adds hardware power, heat and size characteristics, and software end-of-life dates to the knowledge library to support data center risk reduction and cost cutting efforts.

Fast roll-out and easy maintenance

Delivered as a system of one or more appliances, or as a packaged service that takes care of the details for you, Tideway Foundation arrives preconfigured, and is up-and-running in hours. Because Tideway Foundation uses agent-free data center indexing techniques, there is no agent infrastructure to install and manage removing the problems typically associated with implementing and maintaining agents across thousands of servers. Tideway Foundation's user interface is totally browser-based, so roll-out to the IT organization is greatly simplified.

- Low Total Cost of Ownership (TCO)
- Fully hardened and penetration tested appliance for high security
- Fast deployment, and therefore time-to-value



"In their quest to improve process efficiency and business downtime, many

organizations rely on configuration management solutions to gain a business-oriented view of their complex IT environment. By building and maintaining a model of their entire IT landscape, companies such as Tideway help their customers achieve their best practice goals."

Jasmine Noel,
Ptak Noel and Associates

Fast Time To Value

- No software to install – be up-and-running in hours
- Low impact model-driven data center indexing requiring no new agents
- Packaged service available – results in 30 days

Maximum Coverage

- Reasoning engine recognizes entities from individual software components up to complex, large scale, distributed business applications
- Discovers, models and maps virtualized and clustered environments
- Dynamic Discovery Extensions make it easy to discover new technologies not natively supported
- Regular knowledge updates

Verifiable Data Quality

- CI provenance is both transparent and traceable
- Provenance ensures information is verifiably accurate building trust in the underlying data
- Enhanced control over information aging and lifecycle ensuring data remains both accurate and current

Proven Enterprise Scalability

- The only Application Dependency Mapping solution with proven scalability up to 50,000 servers
- Models thousands of business applications, tens of thousands of servers and millions of relationships

Flexibility

- Search Query Language makes report building and data export easy
- Extensible graph-based data model accentuates significance of CI relationships
- Easy creation of custom patterns using script-based pattern language (TPL)
- Keeps pace with high rate of change without changes to core application code

About Tideway Systems

Founded in 2002, Tideway Systems provides the platform for data center search. Tideway Foundation software continuously maps application relationships to physical and virtual infrastructure, including the dependencies between them. This single, automated view of application topology helps IT professionals to visualize and report on the data they need to make informed decisions. Foundation acts as a single, system of record for the most reliable and accurate configuration data, enabling its customers to cut costs, reduce risk and better manage change. Tideway is rated as a category leader by prominent analyst firms.

Tideway's customers include Dresdner Kleinwort, ING, Linklaters, and Mizuho Bank. Partners include ASG, Cisco, Computacenter, Compuware, Sun, and VMware. Tideway has over 100 employees and is headquartered in London and New York, and has offices in several other European and US locations.

You can't manage what you can't measure, but you can't measure what you can't see. What we really want to know is how one infrastructure asset relates to other assets—where are its dependencies?

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