

INTASOFT INTACHANGE 3.0

An Evaluation paper by Bloor Research
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Review date : February 2007

Anyone interested in change management should take a good look at IntaChange and this goes double if you are also using Microsoft Project

Philip Howard

IntaChange from Intasoft is a browser-based change management solution that requires no software to be installed on client desktops. The product ships with support for ITIL (IT infrastructure library) but, like its elder brother product AllChange, it is extremely flexible, so that you can customise virtually everything within the environment and so that you can use IntaChange within the context of your own methodology, where appropriate. The product is feature-rich and offers in-depth integration with Microsoft Project as well as with Microsoft Exchange, Microsoft InfoPath and AllChange.

Key findings

In the opinion of Bloor Research the following represent the key facts of which prospective users should be aware:

- IntaChange is a fully-functional change management application with all the sorts of facilities that one might expect. It has been developed using .NET (it will run under ASP .NET 1.1 or 2.0) and is based on SQL Server (or MSDE/SQL Server Express—Microsoft's cut-down version of SQL Server for small, embedded applications).
- The most obvious and important feature of IntaChange is its flexibility. Intasoft's approach has been that the product should include all the functionality that the company expects anyone to need but, in case it has not thought of everything, it allows you to customise more or less anything.
- There is always a danger with a really flexible product that it can become too complex (in the sense of offering too many choices). In order to avoid this, IntaChange is delivered with the ability to turn off functions that you do not want to use. This is done by simply ticking an appropriate check box. Turned off functions can be turned on again at any time. Note that this is different from hidden functions (or users or roles) which are in use but are not shown to unauthorised users.
- To help you set up your change management system as quickly as possible IntaChange is supplied with a number of templates and terminology mappings which you can then adapt to your needs. One of these templates is based on the ITIL (IT infrastructure library) framework, which should prove invaluable in assisting an easy and rapid ITIL implementation.
- An easy to use voting mechanism enables users to participate in the decision making process by casting their votes and recording the reasons why and how they came to their decision (IntaChange builds an automatic audit trail as you go). Rules can be set as required.
- IntaChange provides the ability to record detailed comments and free text against individual data fields with proactive email notification of changes made. You can enforce the entry of comments and then the audit trail will document this for governance purposes.
- The integration with Microsoft Project, which provides automated synchronisation between MS Project and IntaChange, is a particularly strong feature of the product, and the integration with MS Exchange will also be beneficial.
- Intasoft is a small company. While we appreciate that this may put some potential users off, the fact that the company has a significant user base (for example, LloydsTSB, British Nuclear Fuel and Raytheon to name just three) and has been in business for more than 20 years should reassure most prospective customers.
- Support might also be considered an issue but as it is the developers of the product that provide the support rather than the traditional service team, the support you get is of a very high quality. Moreover, the flexibility of the product in matching your own environment tends to mean that less support is needed than might otherwise be the case.

The bottom line

Intasoft conducted extensive research amongst its customer base, and with non-clients, before and during the development of IntaChange. As a result, the product reflects real user requirements. Moreover, the product was early to market, especially with respect to the integration offered between IntaChange and MS Project. However, as it is now nearly three years since IntaChange was first introduced, this early advantage means little today. Nevertheless, the differentiator that Intasoft has not lost is the flexibility that the company brings to all of its products. Intasoft's general approach is that everything is customisable: it pre-builds options where it thinks that is sensible; provides wizards and other facilities to extend, tailor and define new capabilities; and, just in case you want to go down to the code or SQL levels, it allows you to do that too. At the end of the day it is this freedom to configure the product to do what you need to do that is the most appealing aspect of IntaChange, together with the ability to turn off functions that you don't want, thereby keeping the environment as simple as possible.

Background information

Intasoft originally came into being because two Exeter University students wanted to build a configuration management facility to support their own development efforts. Intasoft was founded, in 1986, to market and develop the resulting product, which was originally known as SMS and which was superseded by AllChange in 1991.

The company has a substantial customer list which is peppered with household names (both end users and systems integrators such as Fujitsu, IBM and CSC) and even before the company opened its first non-UK office it had customers in the United States, as well as in Europe, Israel and Australia. It now has a growing presence in India and Bangladesh.

Intasoft works particularly closely with its customer base. It is a small company and depends heavily on a close liaison with its clients in order to ensure that its product development reflects the ongoing requirements of its users. This is particularly true with respect to IntaChange, for which Intasoft undertook a significant amount of research with both clients and non-clients, at both management and shop-floor level, to find out what users really wanted from change management.

It is also notable that although the company has historically focused on direct sales (it has only set up overseas distributors within the last few years—see below) it has no sales force as such, with all of its key personnel being intimately involved with the development of the product. While this clearly has its drawbacks from a marketing perspective, it does mean that those involved with sales are of a higher calibre than is often the case. It is also noteworthy that the company is particularly proud of its excellent reputation as a training and consultancy provider.

Intasoft web address: www.intasoft.net

Product availability

Version 3.0 of IntaChange was released in December 2006. It is a web-based product that requires no software on the client system. At the server level the product is based upon SQL Server (with support for SQL Server 2005 in the latest release) and has been developed using .NET. However, if you are not a SQL Server user (and do not want to be) then IntaChange is shipped with MSDE and SQL Server Express, which are the run time versions of SQL Server and SQL Server 2005 that Microsoft provides for embedded applications. This is free of charge. The most notable difference between these run time versions and full SQL Server is that they don't include add-on capabilities, such as SQL Server Analysis Services. These are not required in an embedded environment though they can be added back in if required, as in the case of IntaChange and, optionally, Reporting Services (see later).

In addition to IntaChange there is also an optional product, IntaView. This is based upon, and provides integration with, Microsoft's InfoPath. It provides a drag-and-drop based form filling capability that allows you to replicate any existing forms that you may already use for change management purposes.

As we shall see, Intasoft has particularly focused on other Microsoft integrations with IntaChange, notably with Microsoft Project and Microsoft Exchange. Reporting can be based on either Crystal Reports (from Business Objects) or Microsoft Reporting Services.

With respect to Microsoft Exchange integration this can be either with Exchange on its own or in conjunction with Outlook (but not the latter on its own). Requirements are Microsoft Exchange 2000 onward and Windows 2000 or later. The product also integrates bi-directionally with Intasoft's AllChange, which is achieved by means of Web Services and SOAP support. A separate review of this product is available from Bloor Research.

Financial results

Intasoft is privately financed and financial figures are not published. Unusually in this day and age the company is neither VC-backed nor has it floated on any stock market. Moreover, the company has no plans to go in either of these directions. However, this does have the downside that the company is very small, with less than 10 employees, which may be a concern for some potential users. However we do not think that this should be a problem. First of all, the company has been in business for more than two decades and, with over 100 customers, is continuing to thrive; and, secondly, the way that the product has been designed has an impact on this. While we will discuss the details below, suffice it to say for now that the configurability of the products is such that both IntaChange and AllChange will support existing working methods with only a minimal effect on the working environment. This means that, once the initial installation period is over, there should be a lower support requirement than might be the case with more prescriptive products.

In 2001 the company made a substantial move into overseas markets, and Intasoft now has an office in the United States, as well as a distributorship agreement with partners in both Australia and China.

Introduction

As we noted above, the key feature of all of Intasoft’s software is the flexibility provided to allow you to run the products in whatever way best suits your business. For example, by default, IntaChange refers to IntaChange Management Documents (ICMD) but you can call them “change requests”, “trouble tickets”, or whatever else is appropriate.

Perhaps more significantly, IntaChange also uses the ITIL (IT Infrastructure Library) terminology and procedures as one of its out-of-the-box templates. While you can similarly customise or replace this approach as your requirements demand, support for ITIL is important because it is increasingly recognised as the standard approach for best practices within IT service management, both in the UK and worldwide. In practice, ITIL is implemented as a template—if you don’t like it, you simply amend that template or create your own.

Look and feel

When it was first introduced, IntaChange was entirely managed from a single screen, from which you both created your change documents and viewed them. However, with this release, Intasoft has added a second screen, which is the Home Page (see figure 1), where you can have groupings such as those shown.



Figure 1: The Home Page

From here you can drill down into the main action screen (see Figure 2) where, thanks to the product’s role-based security, the use of user profiles means that you only see what you are allowed to see. You can also assign capabilities to roles rather than to individuals. Other security features include support for Windows or Active Directory account logon, and passwords are encrypted.

The main activity screen itself is split into two halves, with a summary window at the top and a detail window at the bottom; with tabs that you can select for administration, preferences, reports, integration options, and so on. Further tabs are available as you drill down

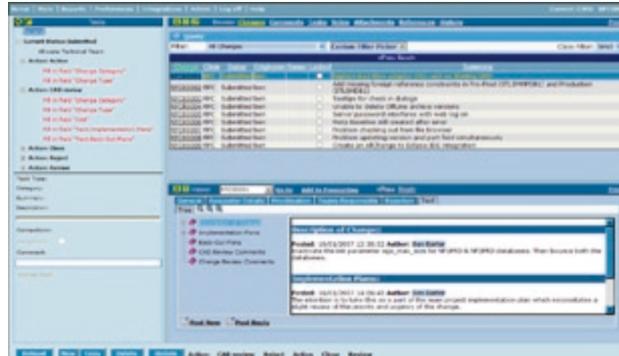


Figure 2: Screenshot showing tabs and task list

into lower levels and there are facilities to automatically jump to the relevant place when, for example, there is an error.

Of course, the detail you might wish to see may incorporate multiple views of the data that would not fit onto a single screen, so the detail pane needs to provide additional details that you can drill down into. In the first release of the product this was done using ‘envelopes’ grouped vertically but since then the company has introduced support for horizontal groups using tabs, so that you can use either tabs or envelopes according to preference. In practice the company reports that most users prefer tabs, as illustrated in Figure 2 (above). In this screenshot note the presence of a task list, which is discussed later.

You can have as many envelopes or tabs as you like, you can call them whatever you like, you can define your own, you can re-position them on screen by dragging and dropping them, and so on.

When selecting data there are pre-built filter options that can be used to select particular subsets of your data, and there are also drop-down selection boxes that allow you to specify your own filter criteria. A useful addition in IntaChange 3.0 is the ability for users to save their own filters for subsequent reuse.

The software also provides the ability to view your changes either from a data perspective or calendar perspective, as required. In the case of the latter this may be based on completion date, start date or any other date field that you wish, using the product’s pop-up calendars. Note, that if you are using both start and completion dates (which will by no means always be the case) then within the ‘Advanced Prerequisites’ capability provided, you can specify ‘rules’ such as “completion date must be at least one week after start date” or whatever is appropriate.

The user interface has been designed by Intasoft in conjunction with Plymouth University (specialists in this area) and has

been well, and attractively, designed. However, you cannot tailor the look and feel of the screen itself in terms of colours, fonts and so forth. On the other hand, you can use the preferences tab to add or remove columns, to change the number of rows that are displayed or to put in column wrapping; and the screen will also be personalised depending on your user role, so this should not be a significant issue. You can further customise the environment by adding your own 'splash screens'.

Changes

As far as your changes are concerned, you can do the sorts of things that you would expect. You can create ('new' in Figure 2, which operates prior to 'add'), delete, or update changes and you can also copy changes. This last option works similarly to the creation of a new change except that it retains the content of most of the controls, so that they do not have to be re-defined, thereby getting you started that much faster. Detail that it would not make sense to retain, like status information, attachments, references, and so forth, is not copied. Relevant permissions and pre-requisites are checked automatically when you create an ICMD and, in the case of pre-requisites the product also supports an advanced form of these known as 'constraints'. These allow the definition of arbitrarily complex dependent conditions through a Constraint Editor, which allows you to define when something must happen and what must happen, as well provide an appropriate description of the constraint.

Going further, you can group changes by category, you can re-categorise them, and you can set priorities, define relevant calculations, display warnings, define criticality, and set up escalation procedures. You can also include estimates such as the extent to which a project is complete, the amount of effort that is required to complete the project, and so on. Other options include the ability to have changes automatically assigned at creation time, and the ability to email relevant parties to notify them that this change has been created. In the latest release the software will also automatically detect unsaved changes.

These are just examples of what has been pre-built. In practice, you can define your change any way you like and you can include however many components you wish, each of which may be whatever you want them to be.

More complex facilities include the ability to define prerequisites and rules that may be applied to your changes. For example, you might want to define a rule that says that you can't approve a change request unless all child change requests have also been approved. You can also define references from one of your changes to another.

Workflow and tasks

There are substantial workflow capabilities within IntaChange that allow you to define the progression of your changes, the processes and procedures that need to be applied, the urgency of the requirement, review processes, and so on. Workflow definitions are created by means of wizards provided within the product as opposed to being graphical.

Associated with workflow are tasks and task lists (see Figure 2). Tasks in IntaChange may be compulsory or optional and are intended to be informative, helping to explain relevant policies, procedures or guidelines. Compulsory tasks are, by default, worked out for you by the software but, as usual with Intasoft, you can customise this as appropriate by means of a wizard.

Customisation

As we have noted, Intasoft helps users to implement good practice by providing out of the box templates to support industry best practices and frameworks such as ITIL. At the same time, it also provides complete flexibility in allowing you to specify the rules you wish to work by. The primary mechanism for allowing this customisation is through the definition of processes via classes and lifecycles, along with a wizard that is used to configure workflows. In addition, you can also use SQL to define site specific database code.

Another significant customisation element is the use of user defined fields (UDFs), which provide exactly what their name suggests. The initial creation of a UDF is done by means of a wizard, as illustrated in figure 3, which prompts you to enter the relevant details, based on any datatype supported by SQL Server. In addition, there is a 'duration' type UDF to support hours, days, minutes and so forth. Most of this should be self-explanatory; however, one useful feature is the Show Control option which allows you to see what the generated field will look like, as an aide to design. In addition, IntaChange supports cascading UDF sub-lists that are used for parent-child relationships (Figure 3).

Also noteworthy in Figure 3 is the Value Constraint field. This allows you (optionally) to set text fields to be alphabetic, alphanumeric or numeric and, in the case of numeric fields (note that this is not the same as a text field constrained to be numeric), this allows you to define a specific range of values for the field. You can also define expressions, selected from a drop-down box, for averages, counts, sums, minima and maxima, and so forth. If the provided expressions do not fulfil all of your needs then you can define additional expressions using SQL. In this context it is worth noting that there is a special file

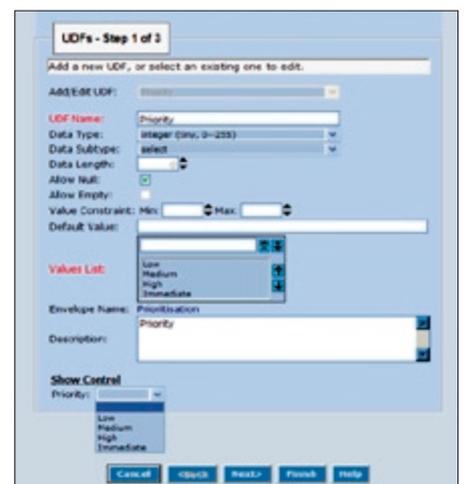


Figure 3: Creating a UDF using a wizard

provided by Intasoft in which you can place your own stored procedures, SQL functions and so on. The idea behind this is to support IntaChange in loading these additional functions, as required.

Another important generic feature related to user defined fields is to allow important UDFs to be included in any emails generated about changes. The values of any specified field's values will be included in the text of emails, together with whatever other fields the system considers appropriate to the email (such as: all emails about changes include the summary column). This facility might be used to include, for example, a Priority UDF if this is considered useful for the recipient.



Figure 4: The Calendar view

While on the topic of priorities, one useful feature is the ability to colour code your user defined fields, for example Priority. In practice, up to five colours are supported and these can be used to display (or print) relative priorities within the product's Calendar View, as illustrated in Figures 4 and 5. This has been extended by the use of Gantt charts in the latest release.

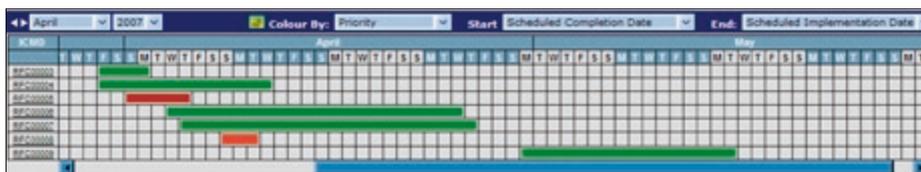


Figure 5: The Calendar view showing Gantt charts

Most of the other notable features with regard to user defined fields are particular to specific datatypes. For example, certain types of UDF (those related to people), have hyperlink labels attached to them, to permit easy e-mailing.

Also significant is the fact that you can include calendar control facilities (including time) for input to relevant fields, as illustrated in Figure 6. This ability to easily define the time as well as the date enables SLA (service level agreement) information to be collected and monitored as response times, costs, and so on. Further, it is worth noting that you can set the time to be either server-based time or browser-based time, which will be relevant when these are in different time zones.

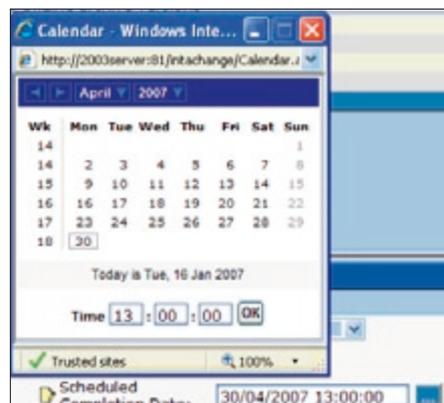


Figure 6: The Calendar Control

Users and roles

While the definition of user roles, which determines who (including external clients in some instances) can read, write and view what (which is controlled down to the level of individual data items), is a function of the administrator, the use of roles has a significance that goes beyond administration. It is important, for example, to understand that a change originator, for example, may not be the same as the change owner, and this is defined by means of roles. Similarly, it is roles that determine what perspective of the data each user has (the 'user view'). IntaChange also supports the concepts of both static and dynamic roles. The latter allow you to change role definitions and permissions at run-time. In effect, they allow you to have run-time exceptions.

There is a facility within the preferences tab to assign yourself as 'out' or otherwise unavailable, together with a reason or comment, and you can create pre-defined rules within the approval mechanisms that will default to an assigned deputy if you are out. This is consistent with Intasoft's overall approach: allowing you to define your own rules and thereby giving you maximum flexibility.

Integration with Microsoft Exchange

One very helpful feature of IntaChange with respect to users is the product's integration with Microsoft Exchange which, optionally, may be extended to include Outlook as well. This allows you to populate IntaChange (any relevant user defined fields) with contact details from an Exchange database, and the browsing of contact details. This means, for example, that alerts or comments can be sent to appropriate recipients (typically via email) either by the system or by users, without their having to know the relevant details.

The actual process of creating the relevant integration (which is the same for Microsoft Project—see later) is illustrated in Figure 7. This should be fairly obvious: you are presented with a tree view and when you highlight a particular field then the relevant IntaChange field is displayed automatically and you can select the appropriate Exchange field to use as an equivalent for the mapping. As an alternative to using this point-and-click based approach, the settings for Exchange can be displayed as raw XML, so that you can work at that level if you prefer.

Approval mechanisms and responsible teams

Approval mechanisms need to be flexible: people may be out, or in a meeting, or otherwise unavailable. To cater for all these possibilities requires a good deal of flexibility, which is exactly what IntaChange provides. For example, you could build (and, indeed, some customers have) an approval mechanism that allows the definition of a primary approver, secondary approver and back-up approvers for any value in a user defined field. Rules can be defined which automatically cause the secondary approver to be notified that he/she is required to approve an item if the primary approver is either unavailable or has not performed the approval by a specified date. Likewise the back-up approver can also be automatically notified if either the primary or the secondary do not take the appropriate action.

IntaChange allows you to set up teams that are responsible for particular change requests, which may be a Change Advisory Board, technical team, testing team or whatever. The way that voting procedures are supported for these teams is typical of Intasoft's general approach: the most obvious methods—unanimity, a majority to agree, a specific number of people to agree, two thirds majority wins, decision with the most votes and even an 'all but one' (which allows a single dissenting vote to be ignored)—have all been pre-coded and you can simply click on the one that you want to use. This applies regardless of whether this is merely an advisory vote seeking a persons opinion or a definitive vote.

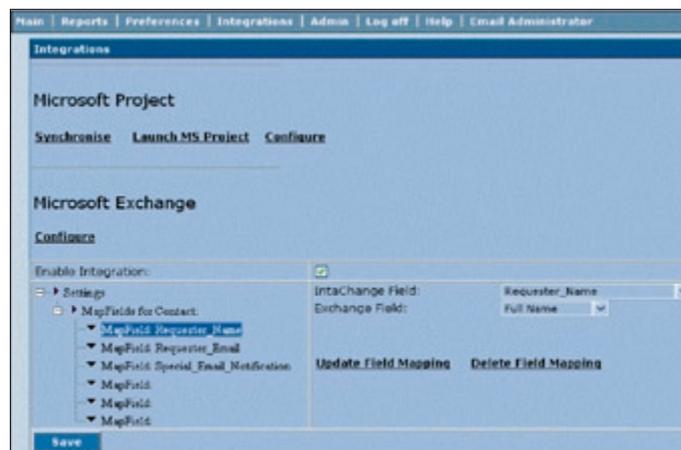


Figure 7: Integrating with Microsoft Exchange

Vendor information

Apart from definitions of voting rules you can also define what will happen if a change has not been agreed by a pre-defined date. This would typically involve the product's workflow capabilities which, in this case, you might use to define an escalation procedure. There are also various facilities to see who has voted, how they have voted, who has yet to vote, and so on, and there is the ability to automatically email all those who have not voted 'n' days before a deadline, which is particularly useful as it gives you a chance of taking corrective action before the deadline has been reached. The format of these emails is fully under user control though you can use the product's automated generation feature if you prefer. You can also set up the software to email voters whenever a change enters a new status or when a definitive decision has been reached. Further, the product can log all such emails with their full content to provide an audit trail of these emails.

Text and comments

There are extensive facilities in IntaChange to support the addition of comments and the use of text. In the former case you can add comments (there is a built-in spell checker) against any field in your change, and then other people can append their comments to your comments. An obvious benefit here is from an auditing and governance perspective, particularly with Sarbanes-Oxley in mind. Comments enable you to record the reason why you have changed the value of a field and thereby prove to an auditor that your reasoning was correct rather than just rely on some audit trail recording an image of what

the field value was before and after you changed it. An icon is displayed alongside each individual field you define, which changes its appearance to show if there are any associated comments.

You can view and filter comments in a variety of ways: look at your own comments, view by date, view comments on open changes only, and so on. As usual, this is subject to the role-based security already discussed and you can also define additional filter options (in general—not just for searching comments) by means of drop-down facilities provided by the software. If appropriate you can also email comments to your colleagues, simply by clicking on a button.

In addition to your own comments, you can also attach external files to a change. For example, you might attach a screenshot or a Word document.

Text support in IntaChange is not limited to comments but also includes more specific requirements such as descriptions of change (see Figure 8), implementation plans (ditto), back-out plans, change review comments, and so on. As a formal part of the change management there are additional viewing capabilities for these documents, which can be organised hierarchically and displayed via a tree viewer. A full audit trail of all of these details is automatically maintained (as it is for the whole environment) with complete 'who did what and when' type functionality. Further, as one of the configuration options, you can implement full text indexing to provide faster access when searching, if required.

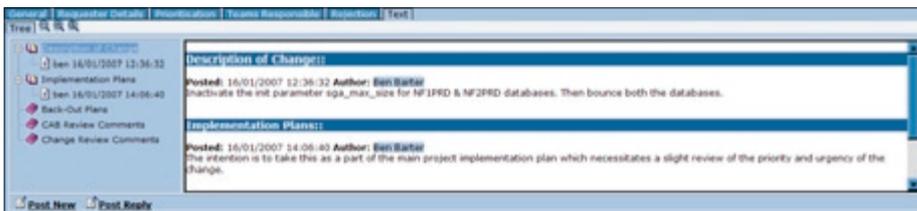


Figure 8: Describing changes and implementation plans

Integration with Microsoft Project

A major feature of IntaChange is the tight integration with Microsoft Project, which allows you to update either one from the other, applying to any field (including customised fields in the case of IntaChange) that is shared between Project and IntaChange, with settings defined as discussed earlier with respect to Microsoft Exchange.

Where updating is taking place you can determine which of the two products acts as the master for that field and then you can update in either direction by means of the synchronisation feature that Intasoft has provided. This is literally just an appropriately labelled button that you have to click on. The only thing we would say is that synchronisation is only available in the IntaChange environment and, from Project, you have to exit the environment and go into IntaChange to perform the synchronisation.

The big advantage of this integration is not so much the synchronisation per se, though this will be beneficial in its own right; or the additional facilities it grants to IntaChange users; but in the amount of keying that is eliminated. While this will apply to IntaChange users (with updating of change details such as date fields, for example) the big benefit is expected to be for existing users of Microsoft Project, for whom re-keying is currently a major part of their lives.

Reports

In addition to the search and filtering capabilities we have already discussed, IntaChange also includes a number of pre-defined but extensible reports. These are available via either Crystal Reports or Microsoft Reporting Services (as required) and provide output in HTML, Microsoft Word, Excel, .PDF and rich text format. In practice the reports simply generate the relevant SQL and you can view this and extend or customise it if you wish. There are also various pre-defined capabilities allowing you to add your own logic to reports. Of course, since IntaChange is based on SQL Server, then any business intelligence environment that runs in conjunction with Microsoft's database can be used for query and reporting purposes. This applies not just to changes themselves, but also such things as measuring the performance of developers and those responsible for delivering changes. IntaChange itself provides a wizard for defining queries against the SQL Server database.

In addition to reporting, IntaChange also provides scheduling capabilities. Thus queries, for example, can be scheduled (via a wizard) to run at a particular time. While on the subject of scheduling, there is also a wizard to add or amend scheduled jobs so that you can set up rules such as "within seven days of x do y".

Administration

A number of the facilities that we have already discussed fall within the category of administration, such as the creation and management of roles, workflow definitions, rules for approval mechanisms, user defined fields, and so on. However, there are also a number of other facilities that we have not mentioned. For example, there is a facility to display all live IntaChange sessions so that the administrator can understand who is doing what. Another ability is that you can set up permission rules (again, via wizards) that allow you to supersede role-based principles in particular instances. Thus you might want to set up a permission to say that if the owner of a change is the CEO then you can ignore certain prerequisites or voting procedures. We should note that we do not condone such a practice but that is easy for us to say: we recognise that this is often the way life is. As we have previously noted, Intasoft provides best practice templates but allows you to do what you want or need. Permissions can be applied at various levels down to individual fields.

Finally, it is worth mentioning the IntaChange Help facilities. These are very comprehensive and include examples, screenshots and so forth, although some of the screens arguably have too much information located in a single place. In the future, Intasoft plans to let you interact directly with help screens so that you click on a screenshot to drill-down to lower level detail. The existing product makes use of tooltips that will tell you what something means if you hover your cursor over the relevant object.

Summary

We have extolled the benefits of Intasoft's products for some years. In our view, the only reason why the company and its products are not as well known as those of some others is that Intasoft is happy being the sort of company it is: small, dedicated to its user community, and without pretensions to stock market listings and the like. As a product, taken purely in its own terms, IntaChange is at least comparable to market leading offerings and, in a number of ways, superior. Anyone interested in change management should take a good look at IntaChange and this goes double if you are also using Microsoft Project.

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Philip Howard
Research Director - Data

Philip started in the computer industry way back in 1973 and has variously worked as a systems analyst, programmer and salesperson, as well as in marketing and product management, for a variety of companies including GEC Marconi, GPT, Philips Data Systems, Raytheon and NCR.

After a quarter of a century of not being his own boss Philip set up what is now P3ST (Wordsmiths) Ltd in 1992 and his first client was Bloor Research (then ButlerBloor), with Philip working for the company as an associate analyst. His relationship with Bloor Research has continued since that time and he is now Research Director. His practice area encompasses anything to do with data and content and he has five further analysts working with him in this area. While maintaining an overview of the whole space Philip himself specialises in databases, data management, data integration, data quality, data federation, master data management, data governance and data warehousing. He also has an interest in event stream/complex event processing.

In addition to the numerous reports Philip has written on behalf of Bloor Research, Philip also contributes regularly to www.IT-Director.com and www.IT-Analysis.com and was previously the editor of both "Application Development News" and "Operating System News" on behalf of Cambridge Market Intelligence (CMI). He has also contributed to various magazines and published a number of reports published by companies such as CMI and The Financial Times.

Away from work, Philip's primary leisure activities are canal boats, skiing, playing Bridge (at which he is a Life Master) and walking the dog.

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