Case Study – Cobham Aviation Services, Air Traffic Management

Peter Janes, Software Development Manager at Cobham outlines how AllChange was easier to implement than they thought.

Company Profile

Air Traffic Management is a business unit of Cobham Aviation Services and their "Air Traffic Management system" is in use at 120 military and civilian sites across the globe.

It provides Military customers with a solution that has been designed to form an integral part of their air defence strategy both at home and in theatre. It provides civil sector customers with a solution that optimises air traffic movement, both on the approach and on the ground, reducing congestion and maximising the airport's efficiency.

> **"Benefits we had not expected to accrue so quickly".**

Cobham's solutions enable Approach, Terminal, Surface Control and Homeland Defence in either fixed or deployable installations backed by an award winning support team and expert engineering capability.

Problem

Peter Janes, ATC Software Development Manager at Cobham Aviation Services explains;

Context

"There were a number of drivers which caused us to review our Change and Configuration Management (CCM) system.

- The main CCM system ("Dimensions" version 8) was obsolete and had not been upgraded in 5 years. The supplier was prepared to provide technical support but not bug fixes. "Dimensions" is a relatively expensive system, and the costs of upgrading and then adding more users was an inhibiting factor for us.

- A desire to rationalise document storage: documents were held in a number of systems, including various database systems such as SmarTeam and of course, on shared drives. The former in particular being problematic as it was not going to be available to us for much longer which meant we had to migrate our documents out of SmarTeam as soon as possible.

- A desire to rationalise our Change Control systems: The software product development based changes were managed through "Dimensions" but other changes (e.g. Engineering changes) were managed using a paper based system
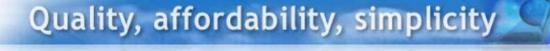
Objectives

We wanted a single system to control both our documents (engineering design documents, user guides and other documents) as well as our software development.

We had well defined processes already in place which we were fairly happy with, so we wanted a system which would fit in with those processes but also allow us to improve and rationalise and support us well into the future.

Finding the Right Partner

We considered 2 options; upgrading to the latest version of Dimensions and then

Quality, affordability, simplicity

purchasing the additional licenses we needed and implementing a new system altogether using Intasoft's AllChange software.

AllChange was already in use within Cobham and had been recommended to us so, we invited Intasoft to demonstrate AllChange to us and we were very impressed with both the capabilities of the software and the experience, attitude and knowledge of Malindi Lamb, the Intasoft consultant.

"Intasoft is very customer focused"

AllChange provided all the features that we needed and at a significantly lower cost than upgrading. It was clear right from the start to us that Intasoft was very customer focused and this was extremely important to us. We also felt that, being a smaller company, they were likely to be more stable than the larger organisations which seem to get taken over all the time severely disrupting their user base.

These, together with the obvious skill and experience and professionalism we had seen so far and the recommendation from elsewhere in Cobham, were the deciding factors.

"Easier to implement than we thought it could possibly be"

Solution

Process

The first thing we did was to take advantage Intasoft's knowledge and experience right from the start.

We needed to not only configure the AllChange software to our processes but also had 3 significant migration stages to go through. We had to migrate from:

1. A paper based engineering change management system
2. Document version control in SmarTeam
3. SCM using Dimensions

We brought Malindi Lamb in on a consultancy basis to help us and decided to start with the document management system as SmarTeam was being withdrawn.

One of the points we had picked up in the earlier demonstration was that we would be able to configure AllChange so we could work the way we wanted.

Not only were we able to do this very easily and very quickly but we were also able to implement improvements to our previous processes.
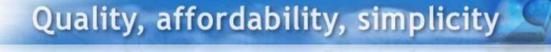
These were benefits we had not expected to accrue so quickly.

Intasoft helped us to write custom scripts to import the data, which had been exported from SmarTeam.

We had expected there to be problems but it all worked first time. The ability to create scripts like this, to do what we want, is a huge plus for us and we can see why it was being recommended to us by other parts of Cobham.

"We were very impressed with the ability to create the scripts and import all the data and it all worked first time"

After the initial consultancy we tested the processes heavily involving the target user community over the next few weeks. This gave us an additional benefit in that we were

Quality, affordability, simplicity

able to use the testing phase as part of the end user training exercise.

With favourable feedback and the end users ready, we then rolled the system out for live usage for document management.

This sounds simple enough but by choosing to implement document management first we exposed AllChange to the less technical community, including technical authors & operations (production and field services).

The fact that everything has worked well is a testament to how easy AllChange is to use.

Specifics
One of the most important advantages that AllChange brought us was an 'out of the box' configuration that provided an excellent starting point. This meant we could be up and running in no time and then adapt and tailor it to our specific requirements at our leisure.

We use the 'AllChange Change Request' feature to implement several different types of 'Change Document' including; Engineering Change Requests, Document Change Requests, Observations and also Stop Notes when production using an item needs to be stopped.

Each of these types has its own process defined with different approval and authorisation controls. We were very pleased to be able to make use of the AllChange voting system to implement our approvals and authorisation as this provided us with electronic sign off with a full audit trail which was of primary importance to us.

"All of our documents including engineering design documents, user manuals and release notes are stored in AllChange"

Results and Benefits
The initial objective was to bring in both documentation and software. At the time of writing we have achieved the first part of that.

The documentation has been successfully moved from SmarTeam to AllChange and all document changes are managed by AllChange.

Due to operational needs we have not yet migrated our software development to AllChange but plan to do this as soon as we can.
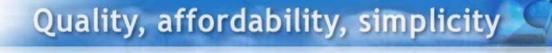
We simply cannot list all of the benefits we have received from implementing AllChange as we are continuing to discover more as time goes on.

For example; As AllChange handles all file types we have been able to create a single point of controlled storage which has improved and clarified our organization of all of our documentation.

The electronic change management system has removed bottlenecks and automated the change management process. There is now high visibility of change to those who need to know and full traceability and auditability of approvals.

The checks and balances trace through well and it much easier to find historical data and to be able to do so is invaluable to us.

"I find it very usable, very useful for searching for drawings. I can find what I want and details of ECRs associated and what has changed."
Malcolm Rice, Planning and Production Controller

Quality, affordability, simplicity

It has been much easier to implement than we thought it could possibly be. The only problems we have encountered have been of our own making due to internal mind sets and clarity of purpose.

"Excellent Consultancy"

Being able to draw on Intasoft's experience has been of tremendous help. The consultant acted as an enabler rather than just implementing what we asked which was just what we needed.

Additionally, the skills and knowledge transfer from their consultant now means we have the knowledge to implement more of the software migration ourselves.

This does not mean we have to do it all by ourselves or even that we want to. The consultancy services are excellent and the level of personal service Intasoft provide exceeds our experience of other organisations. The fact that we can do it ourselves, if we want to, gives us confidence for the future.

Our systems are Safety Integrity Level 2 (SIL 2) and AllChange allows us to provide the required level of control and audit (without imposing more than we need).

The flexibility of the software combined with the skills of the Intasoft team for us, is an unbeatable combination.

The Future

Moving our software over to AllChange is our first priority but we also intend to review our change management processes; migrate a spread sheet holding observations/issues into AllChange as another type of Change document and look to extend AllChange to manage business change.

Whatever we do we will be sure to get Intasoft involved at the earliest opportunity.

"I wouldn't hesitate to recommend AllChange or to use it again" Peter Janes, Software Development Manager

www.intasoft.net
info@intasoft.net

Quality, affordability, simplicity