

Mitigate risks linked to backup, disaster and recovery in SAP BusinessObjects



What is the best way to setup a reliable and professional backup, disaster and recovery strategy for BusinessObjects? I will begin by providing you with a few examples of failed backup and recovery, and then will go into detail about how 360Plus solution can save you time and money, while offering a better quality service to the end users. The cases highlighted below are all based on my long term experience as a BI consultant (beginning 20 years ago on BOBJ and then BW before creating GB&SMITH with my associate). There are dozens of cases I could have used, but for now let's focus on the ones below:

Case 1: A user working for major entertainment company deleted a personal folder containing documents covering the equivalent of over a year's worth of content from their SAP BI Landscape. After having spent almost a whole week trying to recover the documents using a traditional backup process, the content was never successfully recovered.

Case 2: A worldwide automation leader was unable to ensure high availability of their SAP BusinessObjects platform as they were required to shut down BOBJ for 2 hours each night in order to run a full server backup. AsiaPac end users were not able to use the platform in the morning (their time zone)!

Case 3: An American university on the East Coast lost connection with their Windows AD deployment, thus losing all users, including their personal documents as a side effect. As well as this, they also lost all the security settings defined on corporate folders since security was implemented between AD groups and public folders! Another university on the West coast had the same problem when their servers caught fire!

Case 4: An American government agency (requiring a COOP (continuity of operations plan) strategy for SAP BusinessObjects to be enforced) has their FRS stored on 3 NAS. Last summer, a system administrator found out that one of the NAS was almost full, therefore deciding to simply get rid of it. Almost 33% of the BOBJ platform disappeared! No way to recover it!

Finally, **case 5:** An airline company, asked their 6,000 end-users to clean up their personal content prior to a large migration process. Such automatic clean-up processes are possible with our 360Eyes solution, and will allow users to save time, effort and money in the course of migrations (<http://www.gbandsmith.com/sap-businessobjects-solutions/optimize-business-objects-bi4-2->

[upgrade/](#)). But let's come back to the topic at hand; backup, disaster and recovery. A user in Brazil started deleting documents that actually turned out to be corporate files! An end-user having the right to delete content from public folders might sound crazy! But as crazy as this may sound, keeping control over security by using the CMC is very tricky (a NTFS-like way of implementing security): after all it is difficult to setup and control security folder by folder without any visibility. (You may know about our matrix solution to implement security through 360View <http://www.gbandsmith.com/360view>). Now getting back to our story... The following day, someone in Korea was complaining about most of the corporate documents being gone. A helpdesk ticket was opened, and finally, the BOBJ administrator arrived at the office, realizing there were large gaps in the platform data. That was the starting point of a black day, or I should say: a black week (you will understand later). So during that day, they first attempted to troubleshoot the issue of the disappearing public documents. Then, they looked for a BIAR file to realize that their artisanal script is not running as expected. No worries, a full server backup is available! Unfortunately, this was not as simple as one may think. They indeed had a full backup copy, so they decided to try and restore it. As a result, by the evening, the BO production server used by 6,000 active users worldwide was stopped. Restoring it from a copy made the previous week was also impossible, so, they ended up using a 10-day old copy (full server backup including BO, FRS and CMS) instead. Done at last! Wait a minute, not yet! The following morning, they had a SAP BusinessObjects platform up and running BUT using 10-day old data! You might feel lost at this point... Imagine how they felt! So, a quick recap: Monday: deletion, Tuesday: troubleshooting, Wednesday: recovery using a 10-day old copy. This is the issue. 6,000 active users means A LOT of activity on the platform over just 10 days. Would you really like to see that backlog (administration work such as security, new users then IT team work such as new releases, then ongoing scheduling jobs (instances, etc.) and finally end users like a Brazilian guy creating reports)? Therefore, for 4 days they tried to recover whatever they could! For 5 days, BOBJ was down: 1 day to restore, but 4 days for recovery after the disaster (or almost disaster). It was such an issue that even the CEO was informed! Then, everybody in the company held the BOBJ administrator accountable for the issue. His answer was: "I asked you several months ago to buy 360, so this is your responsibility!" They contacted us, and believe me, it was the fastest and most simple deal ever. No negotiation, no discount, no boring purchasing process.

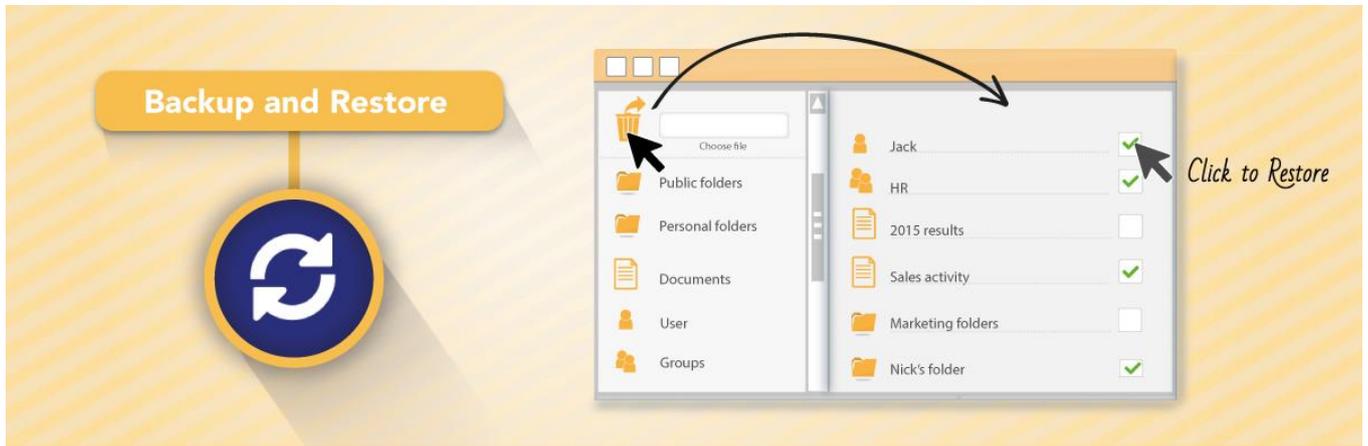
You think this will never happen with your deployment? You think you will never have to cope with those 5 cases? Your answer could be:

"No problem, we have a BusinessObjects disaster and recovery strategy in place! We have a BIAR file somewhere, maybe, or a full copy of the server." Real life is more like scenario 1. The admin's answer will be in 50% of the cases: "we don't backup personal content" and 50% "give me 2 days or a week just to restore your deleted documents!" Just retrieving accidentally deleted objects is a big deal! If you don't trust me, **you can always crash-test your platform and see if you can restore a single lost object (a personal document for instance) in 5 minutes (that end user need a C level in particular). And in case of disaster, can you have a new platform up and running and fully operational within two hours at best? Probably not! 360Plus will do the job, whatever the need or case!**

If relying on BIAR files you should know that you will have to cope with performance issues, not to mention BIAR / LCMBIAR files are not dynamic and generally do not include personal content. If relying on a full backup copy only, how can you use a full backup to restore a single lost object? Plus what about the content created and not backed up since the last full backup process was run?

360Plus is like an insurance. No need for it until an accident occurs!

By law, you have car insurance, by law, you should have 360Plus!



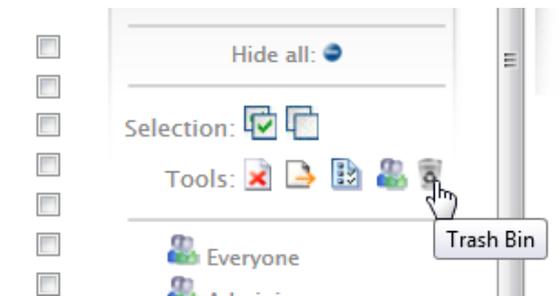
Now, let's find out how 360Plus can turn the 5 failed examples into five-minute operations. From a pure technical perspective 360Plus is just a web app deployed on the BOBJ web application server (Tomcat, WebSphere, WebLogic, Netweaver, etc.) in only 5 minutes. 360Plus is only one module of our 360Suite web app, (each module in 360Suite can be purchased individually), which includes 360View for security management and bulk updates (such as bulk-modifying webi universes from unv to unx) and replacing the CMC, 360Plus for backup and promotion, replacing LCM or the import wizard (I know it is old-fashioned, but we still support clients running our solution on Xir2), 360Cast for dynamic report bursting (prompt values and filter values are stored in a database) launched by using your Enterprise job scheduler (Control-M, UC4, \$U, TWS ...), as a replacement for Publications; finally, 360Bind to automate regression testing (report data output comparison, also including charts at pixel level). Such regressions can be very difficult to evaluate during migrations, when applying a SP, modifying universes or BW, ETL, etc. This is all part of the risk mitigation strategy you should set up for your SAP BusinessObjects platform (hence the subject of this post!).

Once installed, 360plus allows scheduling dynamic delta backups. You only need a location to store the backup files (not on the BusinessObjects server itself, as it is not the most suitable place, especially in the case of a disaster scenario). Upon first launch, 360Plus will back up every single element on your platform: users, groups, personal documents, universes, custom access levels, security, instances, scheduling jobs, categories, corporate content, etc. The first full backup is the longest (It took two to three days with one of our biggest clients with almost 100k end users) and usually takes between a few hours up to a couple of days, this it is dependent on the size of the platform but you can always split the first run into several small jobs. The other great thing is that you can run this backup job using an enterprise job scheduler such as Control-M (CtrlM), DollarU (\$U), TWS, UC4 or any other scheduler returning exit codes and logs displayed in the scheduler. This is a very important feature, as the scheduler is the only program able to run the backup at the right time when the CMS is up and running, when the NAS used storing purposes is also available, when no scheduling/publications are running, etc. This being said, the cool thing is that all the next runs will take only a few seconds or minutes (10 minutes for the 100k users client, yes I know it insanely large, but it is our specialty, and we are working on a new deployment which is almost twice as large. We love such challenges @GB&SMITH!). As 360 plus will only backup modified or deleted content since the last run, you need to run the backup job every night. It is

BusinessObjects incremental backup or delta backup. You need to specify the number of backed up versions you wish to retain, at default setting it's five. So, imagine a scenario here. The first version you will get of a personal document will be dated when performing the initial full backup (2/1/2015 for instance). Then, the backup job is running every night, but personal documents won't be backed up every night BUT only when content is next modified by the end user, so let's say 3/25/15. So, now imagine that in a year you have 5 backups (you will be then able to rollback) for February, March, June, November and December. If the end user modifies content today, 360plus will delete the oldest version first (the 2/1/2015 one) and will then create a new one as of 2/10/2016. There are more features in 360plus such as automated cleanup and intelligent purging...

And then you can say you have a powerful, reliable, professional BusinessObjects storage strategy or backup, disaster and recovery strategy in place! Yes, you are done! Risk is under control! Because we offer several useful features to take advantage of this strategy:

1) **Recycle bin** for all object kinds (users, groups, personal documents, universes, custom access levels, security, instances, scheduling jobs, categories, corporate content, etc.). For case 1, the 360Plus solution developed by GB and SMITH turned a failed process into a 5 minute operation, and goes on adding value. Indeed, we provide a recycle bin for any existing object (personal documents, corporate documents, universes, connections, security, instances, scheduling jobs, custom access level, users, groups (even AD, thus fixing case 3 as well), etc.) for XIR2, XI3 and BI4. For case 1, using the bin to restore accidentally lost objects is the solution. The recycle bin could have solved case 5 as well to restore SAP BusinessObjects corporate documents. So talking about ROI: I think you are done in just 5 minutes with the Recycle bin compared to 5 days without it! Wait, I suppose you are going to tell me there is a recycle bin in BI 4.2. You are right in a sense, but for corporate folders only. Thus, it is almost useless, think about case 1. Regarding case 5, if you remember, the recovery process was most painful part, unlike the restore using the Recycle bin! This is exactly the second feature we are offering.



2) **SAP BusinessObjects Disaster recovery:** 360Plus can help you fully recover your platform after disaster, but I think you should setup another strategy. You need to setup a full server backup (or a backup of your VM) once a month, let's say every first week or the end of each month. Almost like our client did in cases 4 and 5. But remember the big issue arises when using this backup for recovery (following a disaster). Much of your content will be left out or missing (anything created, modified between the backup and the day of the disaster, plus instances, admin tasks, etc.). This is exactly where 360plus will help you. We have created a recovery job. You only need to specify the date of the last full backup (first week-end of the month) and 360plus will then perform incremental restorations. 360plus will restore any objects created or modified between those 2 dates including security, instances, etc. (I won't list them all again, but you understand we do back-up and restore EVERYTHING)! Regarding case 5, 2 hours would be needed to restore the server, then run the incremental 360Plus restoration. Again, ROI is simple switching from a 4-day manual and tedious (and partial) task to a 2-hour process. Or also, in case 4: from lost BusinessObjects content to an up and running solution within about 2 hours! Instead

of shutting down BOBJ for 4 days, it only takes 2 hours in case 5. In case 4, a reliable SAP BusinessObjects COOP strategy is also set up! Something any end-user can understand after a disaster (BUT not 4 days!!!). In case 2, no need to run full backups every night anymore to ensure proper BusinessObjects disaster recovery strategy, since from now on, it is possible to rely on a powerful backup solution using 360plus, therefore offering high availability to users!

3) **Rollback.** The impressive thing with 360Plus is its ability to perform full backups while also allowing selective recovery. For instance, any object can be restored, in any specific version. You can decide to restore the current version of a given universe (for instance following data corruption), the previous one or a 4-version old copy! Even better: prior to restoration, universes or webis (corporate or personal) can be compared; for instance: the current version against the one to roll back to! 360Plus will highlight all the differences in the web app. Also, as usual with 360Suite, you can export potential differences to an Excel file for later analysis. While restoring you can decide to recover security, instances, etc. Flexibility as usual!

The screenshot displays the SAP BusinessObjects 360Plus interface. On the left, a file explorer shows the 'eFashion' universe. A context menu is open over it, showing two versions: '04/18/2013 16:12:52 | eFashion' and '04/18/2013 10:24:09 | eFashion', with a 'compare' button. The main window shows a comparison of two versions of the universe, titled 'BOR4:6400'. The left pane shows the 'Current version' and the right pane shows the 'Versionned on : 04/08/2013 12:10:07'. Both panes show a tree view of the universe structure, with objects color-coded to indicate differences. A legend at the bottom explains the color coding: green for objects existing in both versions with different attributes, blue for objects added in the current version, and red for objects removed from the current version. A tooltip for 'Sales Person' is also visible, showing its properties: Name: Sales Person, Description: , State: Active, Access: Confidential, Data type: date, Select Exp: C:\club.Sales_Person.sales_person, Where Exp: , Tables: Sales_Person.

4) **And many more features, such as promotion.** 360Plus includes 2 main features (we can say two for the price of one!): backup, disaster and recovery, but also promotion. Two ways to promote, as alternatives to LCM or import wizard, using drag and drop or a scheduled promotion job promoting flagged elements only.

And if you are still not 100% sure whether you should invest in a professional and reliable BO backup solution or not, let me share this last story: I cannot share the client's name, however, it is a major software company operating worldwide, the name of which is composed of 3 letters. They help clients better run their business (just like us!)! A funny story, and I probably shouldn't mention this but... At some point, we received an e-mail asking if we had a reliable backup

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solution for their internal SAP BusinessObjects deployment since a C level accidentally deleted personal documents and there was no way to restore the deleted content. **The shoemaker's children always go barefoot!**

These 6 scenarios can happen tomorrow in your company, organization, etc. That's why using 360Plus is a no-brainer!

To conclude you should **act now!** How can your company invest in some cases millions in SAP BO without relying on a real backup, disaster and recovery strategy? This is critical and one of the backbones of your deployments! If you are a SAP Business Analytics administrator, share this with your manager to justify the purchase. If you are a BI manager, contact us!

All those cases/stories are integral in understanding how we develop our solutions to help clients streamline and extend their BusinessObjects deployments. We can just state: These are a set of solutions for BO admin created by BO admins. 360plus for SAP BusinessObjects backup and recovery is one of the 10 steps of the migration path helping clients save 80% of their budget and migration time!

<http://www.gbandsmith.com/sap-businessobjects-solutions/optimize-business-objects-bi4-2-upgrade/>

For further input, check this out (an old blog post proving that nothing changes):
<https://rbranger.wordpress.com/2012/09/10/backup-recovery-in-bo-4-0/>

PS: This article and others I wrote shouldn't be considered as criticisms against what SAP BusinessObjects offers. We are in the same boat, serving same clients! First of all, that's why there is an SAP partner ecosystem BUT among other thoughts about their competitors, it is even worth it in some cases. One may think other solutions are better, as grass is always greener on the other side. Well, that's wrong. As of now, BO is still the best BI solution. We witnessed customers going away with false expectations and going back to BO. Plus, as you may know, based on our success with SAP BusinessObjects, we are going to become agnostic by delivering a unique and unified security administration interface (<http://www.gbandsmith.com/cybersecurity-solutions/>). It will replace the numerous classical manual administration consoles by a unique, much more convenient and secure matrix interface and will enable business users to manage and audit security without involving the IT department: self-service security administration. By developing this new software, we dig into IBM Cognos, Oracle OBIEE, Tableau (and many more). That's why I can state that it is the same for any Enterprise Software.

Find out more there <http://www.gbandsmith.com/360plus>

Video: <http://www.tinyurl.com/bobjbackup>