Class ID: AS322916

# BIM 360 - one platform for complex health projects collaboration management

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Laurent Praden — Autodesk France

## Learning Objectives

- Collaboration and Coordination with BIM 360 Docs/Design.
- Development to enhance data integrity on BIM 360 Docs.
- Facilitate coordination and manage the Interface between building and biomedical equipment.
- How BIM 360 improves communication with the owner.

## Description

For this project, we used the BIM 360 Docs software as a collaborative platform that centralizes models, documents and metadata.
The main objective of this class is to show how Brunet Saunier Architecture implemented and used the BIM 360 collaborative platform in a large hospital project in Paris, France.
The first part will cover the basic tools and features of BIM 360 Docs that we have implemented on the study and project phases.
We will describe how our firm implemented and used BIM 360 collaborative processes to involve the owner and construction companies (general contractor, plumbing and heating, ventilation and heating).
The owner conducted a procedure that awarded six contracts (disciplines);
each company has been asked to provide complete intelligent models (geometry and data).
In a second part, we will discuss two significant topics.
The first one: How to manage the hospital data management.
The second one: How to ensure a reliable interface between the buildings and the Bio-medical equipment. We plan to use BIM 360 to ensure that the data is unique and consistent, and that it matches the contracts

## Speaker(s)

**Jacques LEVY-BENCHETON**
Architect partner and BIM manager at Brunet Saunier Architecture practice.
- Involved in most of the new design competitions.
- BIM Manager: design and construction stages for large Hospital Projects.
- Assist the client to implement Facility Management Revit digital models.
- Teacher at the “ESTP” engineering school in Paris
- Member of the European Architecture Executive council

## Co Speaker(s)

**Laurent PRADEN**
Laurent is a French Architect leaving in Bordeaux. He began his career at AREP one of biggest French multidisciplinary company as CAD and IT Manager.
He joined Autodesk in 2000 as Senior application engineer for Autocad, 3Dstudio and Architectural Desktop.
Managed the Business development of Revit Architecture, Structure and MEP for the French market.
Helping now AEC companies with Digital transformation, Focused in Excellence and Delivering Value Based on Customer Outcomes

**Brunet Saunier Architecture**

Since its creation 38 years ago, BRUNET SAUNIER ARCHITECTURE has developed a pragmatic approach to the art of building. Rather than an extravagant gesture expressing an ideology, or a symbolic or fashionable proclamation, architectural design must first assure that it does not neglect what for BRUNET SAUNIER ARCHITECTURE constitutes its inescapable point of departure: a detailed examination of what the client seeks from the architect. Seen as such, architecture is above all a response rather than a pre-programmed authoritarian or inward-looking proposal.

The work by Brunet Saunier Architecture, since the early 1980s, has been marked by public commissions. It has specialised since the 1990s in functional public buildings such as hospitals and rehabilitation centres, day care centres, etc.

The BRUNET SAUNIER ARCHITECTURE office now gathers a team of fifty architects and engineers around its partners Jérôme Brunet, Vincent Marchand and Jacques Lévy-Bencheton.

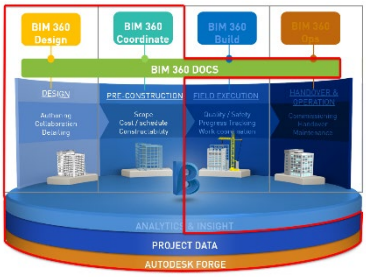
## The Project.

### “New Hospital Lariboisière”

The restructuration of the Lariboisière hospital site is a unique opportunity to link the city to the hospital and to imagine a new hospital building model, more urban and more human, as a next step in the history of this site that began in 1854.
The site enjoys an exceptional situation in Paris. Bordered on the South side by the Boulevard Magenta, on the East side by the Gare du Nord and on the North side by the Boulevard de la Chapelle, it is located at the intersection of several neighbourhoods and urban situations of Northern Paris.
We have decided to assert the presence of the hospital on the boulevard de la Chapelle, creating boldly an urban building, pivot of the surrounding neighbourhoods’ transformation.
The new Lariboisière will proudly bear the features, not only of its time but also of the future, for the understanding of coming generations. The precious authenticity of Lariboisière will continue in time.

## Collaboration and Coordination with BIM 360 Docs & Design

The implementation of a collaborative BIM platform and notably BIM 360 docs for the BIM Management of the project is an indispensable tool. It streamlines and enforces the different processes as well as the different use cases implemented on the project.




*Credit: Autodesk*

The different features of BIM 360 Docs & Design

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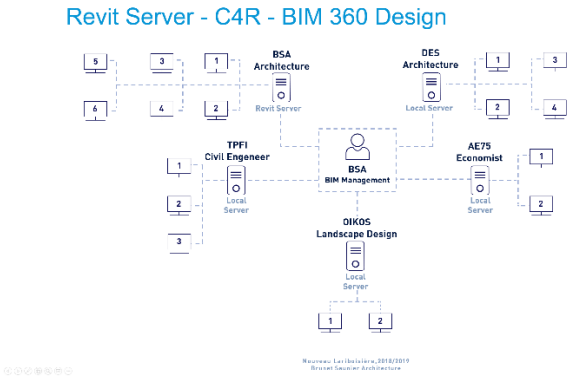
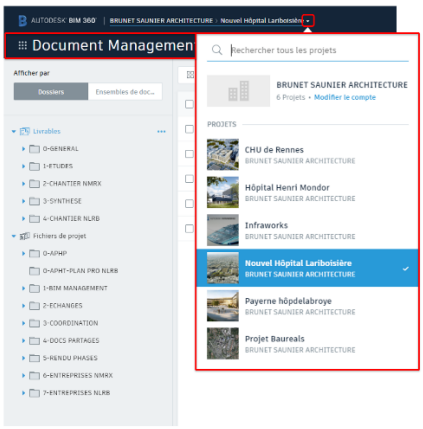
| Organisation chart | |  |
| Projects on BIM 360 | |  |

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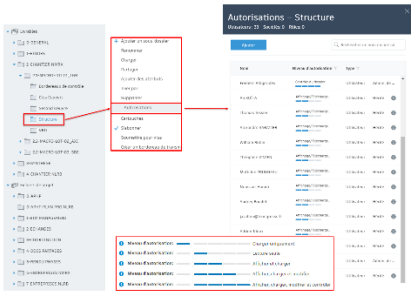
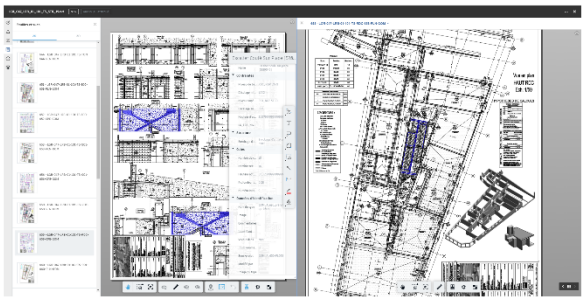
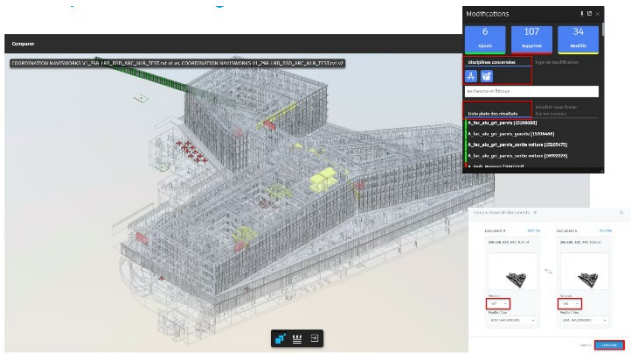
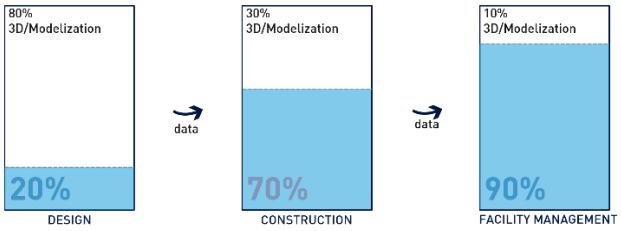
| Access rights | |   |
| Multi views | |  |
| BIM 360 - Mobile devises | |  |
| Models Comparison | |   |

**Development to enhance data integrity on BIM 360 Docs**

1 - The client is at the origin of the data through the program of his operation.
2 - He is also the last to recover it, for the operation and the maintenance of his buildings.
It is therefore up to him to master the organization of graphic information and data produced.

"A structured database, a rallying point for project stakeholders, is the double "static" of the building, a "dynamic" BIM prerequisite in the production and operation phase "




*Credit: Infographic of "BIM for Asset Managers" by IFMA, edited by Paul Teicholz, Wiley 2013*

The different types of data to manage

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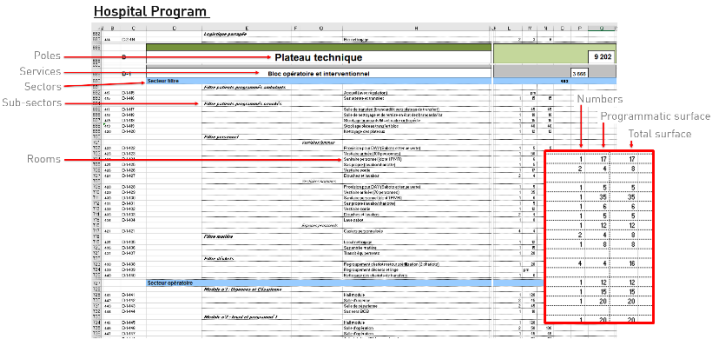
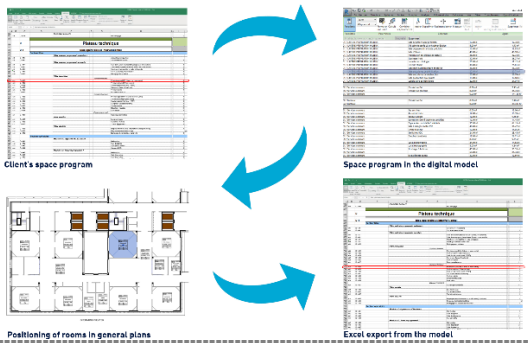
|---|---|---|
| The hospital program | |   |
| Data integration | |   |

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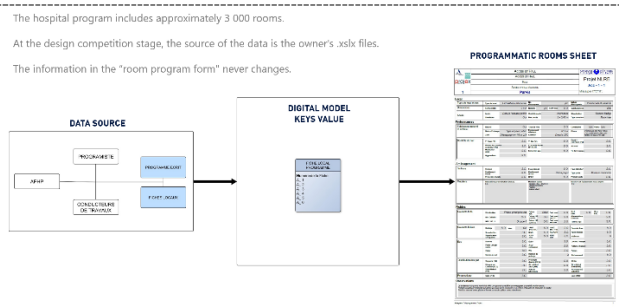
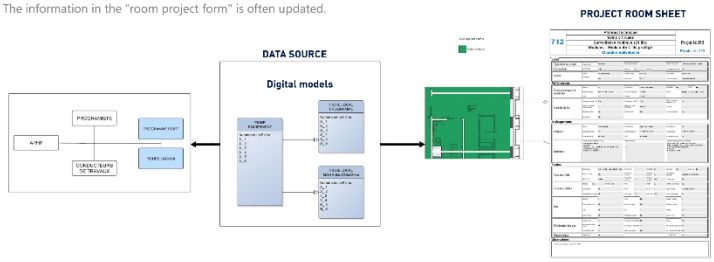
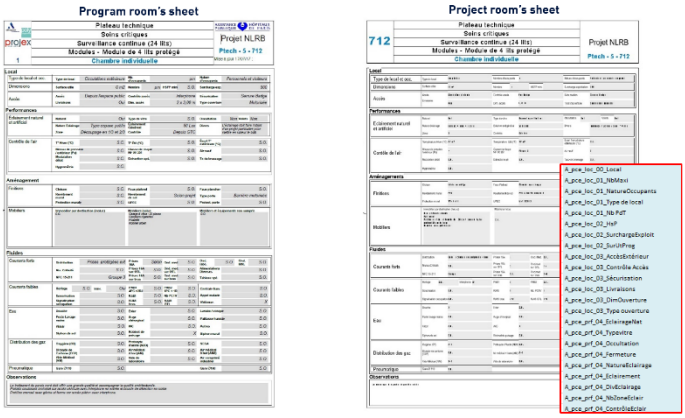
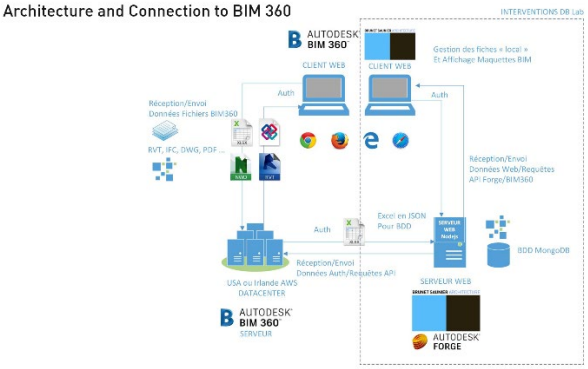
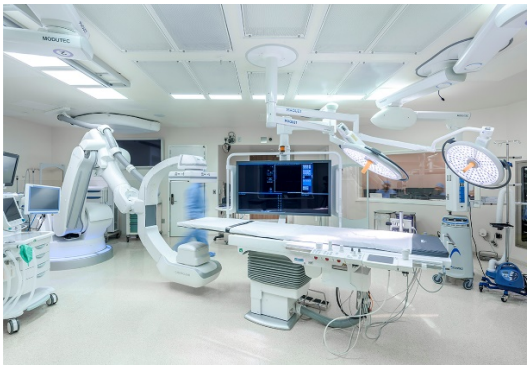
| Space program management | |  |
| Space program management | |  |
| Comparison of programmatic and project data | |  |
| Development architecture | |  |

**Facilitate coordination and manage the Interface between building and biomedical equipment**

The micro-implementation mission is a delicate mission that involves several stakeholders of the project. This mission requires effective collaboration and coordination both with the users of the hospital centre and with the architects and engineers that produce the Revit models.



The different steps of this BIM Mission

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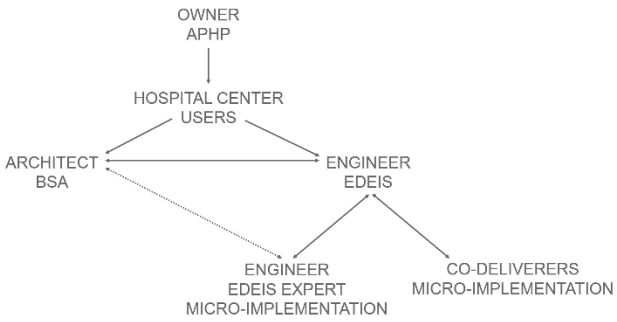
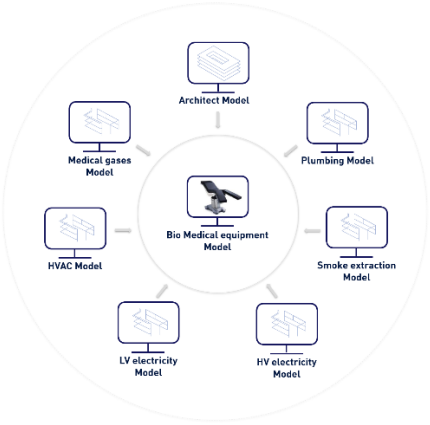
|---|---|---|
| Heavy constraints equipment | |   |
| Partners Involved in this use case | |   |

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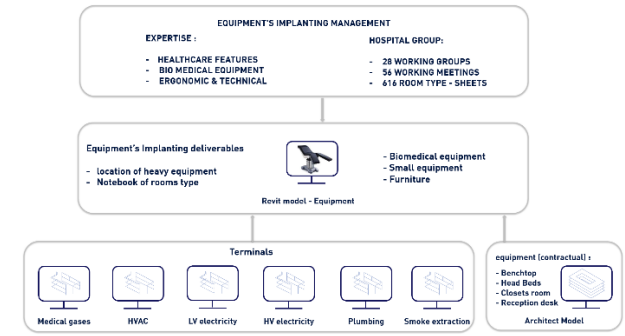
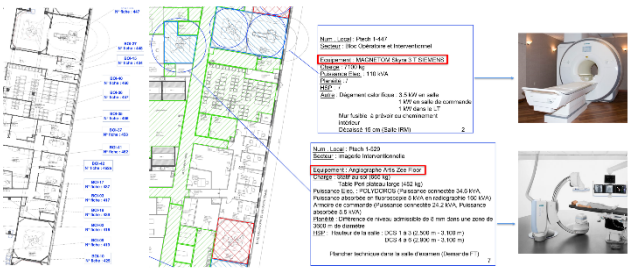
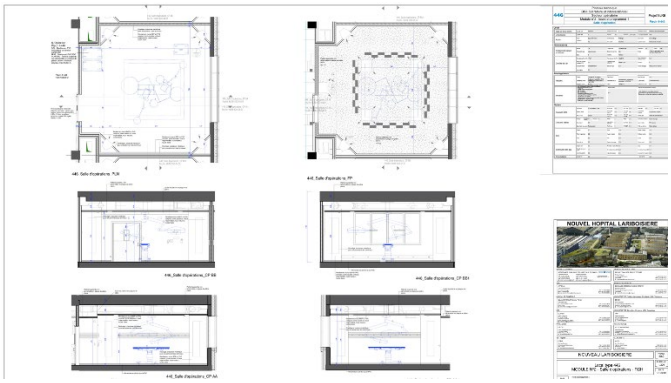
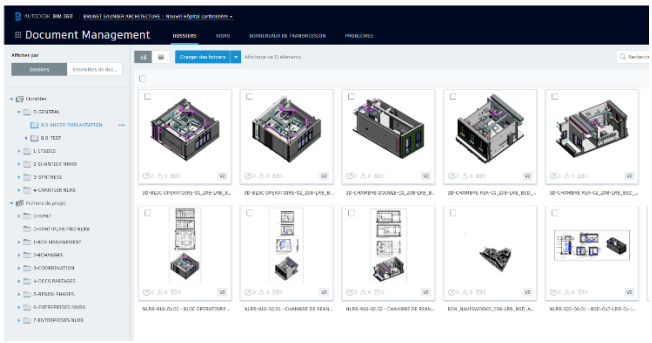
| Global process workflow | |  |
| Layout for the identification of heavy equipment | |  |
| Room type by Sector (6 faces) | |  |
| The process with BIM 360 | |  |