The inside track

WATCH_DOGS™

Taking players into a harrowing urban battlescape of hack-and-be-hacked.

LDrooch_05

Hacker Identified

⚠ **You are being hacked**
76%

WATCH DOGS™ image courtesy of Ubisoft Montreal.

Video gamers are in for an extraordinary adventure with Ubisoft's upcoming release, *Watch_Dogs*, the game where players can hack into a city and turn it into a powerful weapon.

Set in present-day Chicago, depicted here in extraordinary scope and gritty detail, *Watch_Dogs* targets the "ctOS," Chicago's mythical Central Operating System, a network that connects everyone and everything in the city. *Watch_Dogs* explores the impact of technology within our society as players embark on a personal mission to inflict their own brand of justice. In gripping chase scenarios, players can cut through buildings, scale rooftops, and explore the city's dangerous underground to catch a target, all with startling realism and detail.

Recently we spoke with the *Watch_Dogs* development team from Ubisoft Montréal: animation director Colin Graham, cinematic director Lars Bonde, lead game designer Danny Bélanger, lead character graphic designer Jacques Marcoux, and technical animation director Bruno Roy, to gain some insight into the development of this enthralling and complex game.

From a visual perspective, what were your objectives for *Watch_Dogs*, and how did your computer graphic tools enable your team to realize those objectives?
Colin Graham: The initial objective was to create something very realistic. One of the key things about featuring Chicago is trying to get the citizens right. It's great to have the buildings and all the districts look correct, but we wanted to show the right people because the people would be the soul of the city. So there's a huge volume of living city characters and living city

GEOMETRY   NORMAL   DIFFUSE   LOCAL WETNESS   IN GAME

NORMAL 2 OVERLAY   DIFFUSE 2   GLOSS   REFLECTANCE   SPEC OCCLUSION

WATCH DOGS™ image courtesy of Ubisoft Montreal.

animation. And anybody who's from Chicago instantly starts to recognize places, and personalities, in our game.

In order to manage large scenes with large amounts of characters for this game, we used Autodesk® MotionBuilder® software, which we use exclusively for all our animation. We use Autodesk® 3ds Max® software for our character modeling and for rigging components, but we really make the distinction between it and MotionBuilder. Because all the animation is done in MotionBuilder, that really helps our workflow efficiency.

Jacques Marcoux: What we liked about 3ds Max was its great flexibility in creating scripts because during production we needed to work super-efficiently, given that we had only a limited amount of time and a limited number of modelers. 3ds Max helped us get there and its projection tools were really useful too.

Aside from workflow efficiency, what other MotionBuilder attributes did you find valuable for creating *Watch_Dogs*?
Bruno Roy: We really valued how we could combine our homegrown technology with MotionBuilder. We drafted a lot of in-house technology into MotionBuilder and
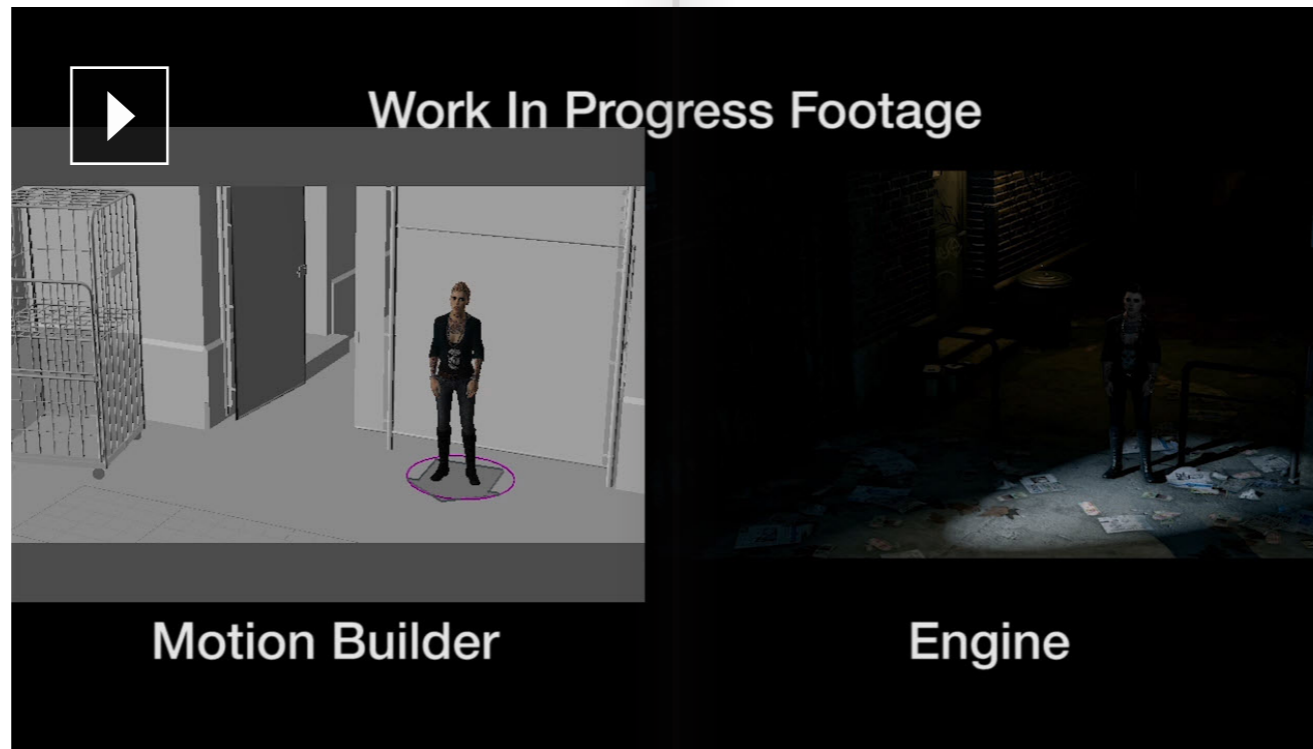
that enabled us to move our animation developments to the next level in a totally non-destructive way.

Lars Bonde: We built a lot of tools around MotionBuilder that allowed us to simulate how a scene would look as if shot for a film. When you're working with a lot of cinematic elements like multiple characters, sets, and camera angles it's essential to get the instant feedback that MotionBuilder gave us.

How would you characterize your relationship with Autodesk?
Colin Graham: We collaborate a lot. With *Watch_Dogs* we're building something bigger than we've ever built before so we're really pushing our tools to the breaking point. A lot of times we're asking more of our tools then they're really designed to accommodate. So the support we get from Autodesk is really important. At Ubisoft we use Autodesk products to make great games. It's as simple as that.

How large are the teams associated with a project of this scope?
Colin Graham: We've used a couple hundred people in Montréal to work on *Watch_Dogs*, so it's on par with pretty much every other big game. We also brought in Ubisoft teams in Quebec City, Paris and Bucharest, and Ubisoft

Work In Progress Footage

Motion Builder

Engine

Reflections to do our auto modeling. That's their specialty. A lot of the secondary characters were developed at a studio in Chengdu, China. We also do a lot of co-development with other studios on an on-going basis. These are some of the ways that Ubisoft Montréal expands its ability to deliver these blockbuster games.

What next gen feature are you most excited about in *Watch_Dogs*?
Colin Graham: Of course, with the next gen we can push the boundaries in creating higher fidelity graphics, keep in mind that we have a brand new engine for the game called the Disrupt engine. However, next gen for us also means that we can bring more to the table for the players. One of the most exciting things is how we're bringing new gameplay mechanics. This was something that was very important for the team. Creating brand new ways for the players to tackle their objectives in the game.

How do you see the future of game designing, especially as demonstrated in *Watch_Dogs*?
Danny Bélanger: I truly think the future of game design is through systemic play. The game itself is basically a toy in which the player can experiment and create his own experience. In *Watch_Dogs* we are really trying to make a game for the players. It means that the player can make choices and play as he sees fit. My role as Designer is to support the player's creativity and expression and not try to force him to play "as designed." This is scary and liberating at the same time because as a Designer it forces us to lose some control. We have to think differently, we have to create systems that adapt to the player instead. Basically, the player's actions influence the game systems and they react naturally and logically. This is very powerful in

a game in which you can use the environment to modify the AI's behavior. I feel we have just started moving down that path and the promise of rich and unique game experiences is limitless.

Do you feel that *Watch_Dogs* is a representation of what will happen with technology in the future?
Colin Graham: Maybe. When we started concept development it wasn't to make a social statement about the world we live in but to create interesting gameplay. But the more we started to look at how you can manipulate things digitally, how you can hack or access things, the more we realized that this is something very possible to do today in the real world. In *Watch_Dogs* we've taken this real act of gaining control of things and we've compressed it down into the gameplay. You don't have to be like a real hacker and write lines of code or anything like that. So it's not like we're predicting the future in *Watch_Dogs* but more like we're paying attention to what's happening now.

WATCH DOGS™ image courtesy of Ubisoft Montreal.