THE WAY
It's meant to be played

GeForce

All the best games

Lose yourself in the action
with the power of NVIDIA

Enemy Territory:
Quake Wars
Neverwinter Nights 2
Call of Juarez
Rise of Nations:
Rise of Legends

Flight
Simulator X

Take to the skies in magnificent flying machines and
see the world brought to life with NVIDIA

THE WAY

It's meant to be played

Ultimate PC Gaming with GeForce

All the best games

Lose yourself in the action with the power of NVIDIA

Microsoft Flight Simulator X
Neverwinter Nights 2
Call of Juarez
Rise of Nations: Rise of Legends

Enemy Territory:
Quake Wars

Take part in the Strogg invasion of Earth
with the might of NVIDIA

Awesome performance, no compromise

For some gamers, only the best will do. And at CeBIT 2006, the best just got better, with NVIDIA introducing the GeForce® 7900 GT and GeForce® 7900 GTX graphics processing units (GPUs). The GeForce® 7900 GT offers an unbeatable package for the serious gamer who's also price-conscious. Like the rest of the GeForce® 7 Series GPUs, it boasts a host of cutting-edge features that make the latest visual effects an effortless reality. However, for those who truly worship at the temple of gaming, there can be only one choice: the GeForce® 7900 GTX. Delivering blistering performance from 512MB of onboard memory and the fastest clock speeds, this is NVIDIA's new flagship card, built to handle the next generation of extreme high-definition titles. And of course, the GeForce® 7900 GT and GeForce® 7900 GTX GPUs are NVIDIA® SLI™-Ready, for up to twice the performance of a single GPU configuration. Prepare to have your concept of what a GPU can do blown away as only NVIDIA can. For more information visit: **www.nvidia. co.uk/page/geforce_7900.html**.

NVIDIA SLI to the max

NVIDIA has once again broken new ground in terms of graphics technology, with the introduction of Quad SLI PCs and SLI technology for notebooks — both based on the NVIDIA nForce®4 SLI motherboard platform. Available from system builders with the awesome power of four NVIDIA® GeForce® 7900 GPUs, Quad SLI takes high definition gaming to the limits. Imagine today's hottest games running at a massive 2,560x1,600 while maintaining silky-smooth frame rates and incredible image quality and that's what you're getting.

For gamers on the go, a new generation of high-definition enabled notebooks can now unleash the power of NVIDIA® SLI™ technology to redefine the gaming capabilities of mobile PCs. To find out more about this revolution visit: **http:// uk.slizone.com**

A star is born

Speed freaks: The GeForce 7600 GT and GS GPUs bring great gaming performance and amazing visual power at an affordable price.

We all want the best graphics, but sometimes it seems like the latest technology is out of reach. That's why NVIDIA has introduced the NVIDIA® GeForce® 7600 GT and GeForce® 7600 GS GPUs. The GeForce® 7600 family offers great speed, Microsoft® DirectX® 9.0 Shader Model 3.0 support and full SLI compatibility for great-looking games, plus PureVideo™ technology to turn your PC into a high-definition home cinema. And that's not all, it will also ensure your PC is ready to make the most of Microsoft Windows Vista, the first operating system to realise the GPU's full potential: **www.nvidia. co.uk/page/geforce_7600.html**.

Welcome...

Welcome to Issue 9 of *The Way It's Meant To Be Played*, the magazine that showcases the very best of the latest PC games. All 21 titles are participants in NVIDIA's The Way It's Meant To Be Played programme, whereby NVIDIA's developer technology engineers help development teams get the very best graphics and effects into new games. The games are then rigorously tested by NVIDIA for compatibility, stability and reliability to ensure any game with the TWIMTBP logo will deliver the ultimate 'install and-play' experience with an NVIDIA GeForce-based graphics card. We also have a special feature on Vista, Microsoft's newest incarnation of Windows, written by Jon Hicks, the deputy editor of *Windows Vista: The Official Magazine*. I hope you enjoy the magazine — let us know if there's anything you think should be included.

Darryl Still
Head of Consumer Awareness and Content Marketing — Europe
dstill@nvidia.com

In This Issue...

Rise & Fall: Civilizations At War

Publisher: **Midway** Developer: **Midway** Release: **June**

Sea Battles:
Rise & Fall is the first game in which naval combat plays a vital role, with spectacular sea battles and the ability to transport military units and weaponry right on to the enemy's doorstep.

C *ivilizations At War* **is the first real-time strategy game that enables gamers to build a civilisation while also thrusting them right into the heart of a battle.** The degree of control and level of detail used to visualise the conflict of four military powers – Greece, Rome, Egypt and Persia – is staggering, but then *Rise & Fall* takes things further. You can assume the guise of one of eight historical military leaders and actually lead the troops right into battle. And what battles! Detailed environments and realistic weaponry bring everything from cavalry charges to naval battles to life using the powerful graphics engine. ∎
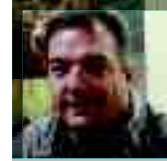
Mark Caldwell, Executive Producer, Midway

Games Inc: "Our Multi-Threaded RTS engine for *Rise and Fall* features dynamic lights and self-shadowing, a powerful particle engine, plus realistic terrain and water. Our partnership with NVIDIA has been invaluable in making that technology a reality."

"You can assume the guise of one of eight historical military leaders and actually lead the troops right into battle. And what battles!"

Case study: Maelstrom

Publisher: **Codemasters** Developer: **KDV Games** Release: **September**

A s a joint production between the legendary UK studio Codemasters and KDV – the Russian team responsible for *Perimeter* – *Maelstrom* ensnares players in a future vision of Earth that's quite unlike anything we've seen before. Set in a time when the planet is recovering from an ecological disaster, the game pits mankind against a new threat – this time from outer space. Using a radically enhanced version of the acclaimed *Perimeter* game engine, *Maelstrom*'s environments are fully deformable and capable of simulating unparalleled levels of destruction. The result is a level of carnage that has to be seen to be believed. The ability to get right into the heart of the battle enables the game to rewrite the real-time strategy rulebook through the addition of stealth elements, guerrilla tactics and extreme unit modification. Awesome! ∎

"The result is a level of carnage that has to be seen to be believed."

Destruction: Giant transforming robots, futuristic 'living' weapons, destructible environments, and a story from a veteran science fiction screenwriter, all help *Maelstrom* take real-time strategy into a new era of action-based gaming.

Neverwinter Nights 2

The Forgotten Realms get the full 3D treatment in this long-awaited sequel

Publisher: **Atari** Developer: **Obsidian** Release: **Out now**

The original *Neverwinter Nights* changed the role-playing landscape – and that's not an exaggeration. With its official *Advanced Dungeons & Dragons* ruleset, multiplayer-orientated design, and as much emphasis on scenario creation and dungeon-mastering as adventuring, it gave fantasy fans a whole new kind of digital role-playing experience. But time marches on, and today's gamer demands the latest visual trickery as well as gaming goodness. Which brings us to *Neverwinter Nights 2.* Built on the rich *Advanced Dungeons*

New original:
The great looks haven't come at the expense of heart and soul – the Dun-geon Mastering tools are more powerful than ever.

"*Neverwinter Nights 2* pairs pedigree with the kind of cutting-edge presentation that role-players rarely see."

& Dragons heritage and open-ended design, it pairs this pedigree with the kind of cutting-edge presentation that role-players rarely see.

Neverwinter Nights 2 takes hardy adventurers back to the Forgotten Realms – a period in its history when peace in the North is about to be shattered by the advance of a dark new threat. All are doomed to fall under this power, unless a hero can emerge and unlock the secrets of the mysterious relic. The story is epic, yet minutely detailed and filled with the fantastical and brutal, just the kind of thing that *Advanced Dungeons & Dragons* fans will love. And while newcomers will have no trouble enjoying themselves in this alternative reality, the fact that the new story integrates familiar places and

characters from the original game is bound to provide even more pleasure for those who battled evil in the original.

The beauty of *Neverwinter Nights 2* is that the out-of-the-box story is just the starting point. Anybody can assume the role of Dungeon Master, using the completely rewritten toolset provided to create brand new adventures within Forgotten Realms. You can then choose to play through these new quests yourself, share them with friends or host your own multiplayer games – continuing in the role of Dungeon Master as the quest unfolds.

Endlessly customisable, forever replayable and fabulously presented. *Neverwinter Nights 2* elevates the multiplayer concept of the original to a whole new level. ∎

Familiar characters:
Creatures and character types in *Neverwinter Nights 2* all conform to the official *Advanced Dungeons & Dragons* 3.5 Edition ruleset.

Realistic movement:
A brand new 3D engine completely transforms the *Neverwinter Nights* experience, utilising thousands of polygons and NVIDIA-supported shader techniques to bring the real-time action to life.

Stunning 3D:
Advanced depth of field effects lend further atmosphere to the game's lavish 3D environments.

Geographical detail:
The Forgotten Realms are recreated in greater detail than ever before, with adventures unfolding on a massive overland map.

Up close and personal:
The powerful 3D engine enables players to zoom right out for a bird's eye view of the battlefield or head right into the frontline to witness the visceral combat up close.

Battle bonanza: With 21 factions vying for supremacy, the game features more than 250 new unit types. Each brings its own special abilities, which open up a wealth of new battlefield tactics.

Rad realism: A vastly enhanced terrain model adds greater visual flair and depth of gameplay. From cliff-top castles to large-scale combat across windswept plains, the game reflects the diverse geography of Europe and beyond.

Umbrellas essential: The newly enhanced graphics engine boasts enhanced dynamic lighting, which captures every glint and spark, while the dynamic weather effects and detailed vegetation add further realism to battles.

Medieval II: Total War

Get down and dirty as you lose yourself in the carnage and gore of the medieval battlefield

Publisher: **Sega** Developer: **Creative Assembly** Release: **November**

Loved by gamers and critics alike and winner of multiple awards, the *Total War* series has transformed real-time war gaming on the PC. And now the latest and greatest in the series is turning back the clock once more, transporting

"It also excels in the capture of fine detail, portraying pure bloodlust in unflinching detail."

gamers to the most turbulent period in European history. Stretching from 1080 through to 1530AD, *Medieval II: Total War* combines turn-based strategy campaigning with the most cinematic, brutal and epic real-time battles ever seen in this genre.

At the heart of this latest grandstanding title is a vastly enhanced version of the *Total War* game engine. Capable of depicting battles featuring more than 10,000 troops, it also excels at capturing the fine detail that really brings combat to life, portraying pure bloodlust and gruesome carnage in unflinching detail. For the first time in the *Total War* series, each troop is an individual, with a unique head and body, weapons

and armour. Each one is also garbed with the rich heraldic colours and glinting arms and armour of the period, with their attire becoming increasingly muddied and bloodstained as battle progresses. Plus, with the addition of siege machines, it's now possible to wage war on enemy strongholds – pummelling city defences, sending walls crashing and setting cities ablaze.

The game pushes the series forwards on a larger scale, too, with enhanced multiplayer battles and a grand single-player campaign.

Medieval II: Total War is undoubtedly the most involving, realistic and ferocious war simulation we've seen from the award-winning Creative Assembly team. ■

Dungeons & Dragons Online: Stormreach

Undoubtedly the most famous role-playing brand in the world, *Dungeons & Dragons* has provided the foundations for some incredibly popular PC titles, not least the eagerly anticipated *Neverwinter Nights 2* (see page 5).

But there's never been a game to bring the full scope of the *D&D* gaming experience to life online. Until now, that is. Enabling thousands of gamers from around the world to venture online, fight alongside one another, and compete for glory, riches and power, *Dungeons & Dragons Online: Stormreach* features dramatic dungeon crawling, terrifying monster combat and a whole host of challenging puzzles. And with this being an official *D&D* experience, gamers also have the opportunity to choose from a range of races and character classes, advancing their characters, amassing equipment, wealth and magical items, and even getting involved in political and territorial struggles. The world's first massively multiplayer *D&D* experience, *Dungeons & Dragons Online: Stormreach* represents a true milestone in the field of fighting fantasy and role-playing. ■

Challenging stuff: Are you a match for the fearsome monsters and dragons? Can you discover the mysteries that threaten *Stormreach*'s existence? Go on, try your luck.

Mike Fricker, Senior Graphics Engineer at Turbine:
"The NVIDIA GeForce products consistently deliver extraordinary rendering performance and features that let Turbine push the envelope of what's possible in massively multiplayer online gaming and pack a lot of graphical bliss into our online worlds."

Case study: Rogue Trooper

Group gaming: Rebellion's latest game features intense online modes, where gamers can experience up to four-player co-operative gameplay.

In addition to publishing the legendary 2000AD magazine, British games developer Rebellion has also forged a formidable reputation for its videogame translations of successful comicbook material. Following the success of its *Judge Dredd* adaptation comes the long-awaited videogame debut of another 2000AD favourite. Created in a laboratory to battle it out on the hostile terrain of Nu Earth, *Rogue Trooper* is a Genetic Infantryman that's gone AWOL since the death of his entire regiment. Determined to hunt down the general who caused their deaths, his only hope is to make use of experimental weaponry and the help of three dead colleagues whose personalities have been ingeniously digitally implanted into his gun, helmet and backpack. Perfectly mirroring the otherworldly visual style of the comicbook, *Rogue Trooper* also succeeds in pushing the third-person combat genre into a whole new realm. ■

Enemy Territory: Quake Wars

Taking the legendary battle against the alien Strogg to the next level

Publisher: **Activision** Developer: **Splash Damage with id Software** Release: **To be confirmed**

Arguably the best loved and most influential PC gaming phenomenon, the *Quake* series has defined, revolutionised and refined the first-person shooter genre over the last decade. Now it's time for the next phase, with the launch of *Enemy Territory: Quake Wars*. Bringing the action fully online to create the ultimate Internet-based strategic combat epic, *ETQW* also takes gamers back to the beginning of the *Quake* story – depicting the invasion of Earth by the alien Strogg army!

As the invasion begins, players can choose to fight either as a human Global Defence Force soldier or as part of the Strogg army. Featuring 'asymmetric gameplay', *Enemy Territory: Quake Wars* develops the differences among the enemy race with five character classes.

Epic battles

Each race has differing abilities and different specialist weapons and hardware, plus they can call on a variety of vehicles and defence systems. With the human arsenal reflecting an extension of current military hardware and the Strogg arsenal tapping into high-energy and anti-gravity technologies, the battlefields come alive with tanks, air units, quad-bikes, forward-command systems, alien walkers, anti-gravity vehicles and more. This amazing collection of sci-fi hardware enables each army to fight in a myriad of ways.

Taking sides:
Players can choose either to defend Earth as a GDF Soldier, Field Ops, Engineer, Range or Medic, or those who pledge their allegiance to the Strogg forces can choose from Tank, Oppressor, Constructor, Infiltrator or Meditekk.

"With new technology and a legendary gaming universe, *ETQW* is set to rewrite the rulebook"

While *Enemy Territory: Quake Wars* remains true to the franchise by delivering intense first-person arcade action, it also introduces new teamwork elements, so you can join up for class-specific missions. Each soldier fights for their own personal victory – gaining medals, promotions, skills and special rewards – but it's only by using the game's advanced command and communications systems (including a context-sensitive mission order system and voice-chat option) that an army can ultimately hope to crush its enemy.

Gaming innovation

Building on cutting-edge technology from id Software and developed by Splash Damage (the team who co-created the massively popular *Wolfenstein: Enemy Territory*), this latest *Quake* epic is also the most visually ambitious. Featuring day and night environments and even accurate simulation of atmosphere and weather, *ETQW* goes all-out to create a coherent and believable game world.

In addition to utilising brand new network code for even smoother online multiplayer gaming, *Enemy Territory: Quake Wars* also marks the debut of a new technology called MegaTexture. Developed by id Software, this new rendering system is able to crunch millions of polygons and gigabyte-sized textures into one single, seamless and non-tiled landscape. With this amazing technology used to generate outdoor landscapes, the game is able to render scenes right off to the distant horizon. What's more, the landscapes provide unparalleled detail and variation, with deserts, glaciers, mountains and other locations modelled down to the last inch.

With brand new technology, meticulously balanced play for up to 24 gamers, and a truly legendary gaming universe, *Enemy Territory: Quake Wars* is set to rewrite the online multiplayer rulebook. ∎

Q&A

id Software's Kevin Cloud (Creative Director) and Paul Wedgewood at Splash Damage (Lead Game Designer) discuss the features and innovations in the unique *Enemy Territory: Quake Wars*

How has the existing id Software game engine been advanced for this new title?

Enemy Territory: Quake Wars' engine is really quite different from *Doom 3*. It shares some systems, such as basic lighting and normal mapping, but the main challenges were the development of technology to render huge outdoor areas, provide realistic vehicle physics and improve networking for large military combat. Outdoor environments are created with incredible attention to detail – accurate simulation of the celestial bodies, atmosphere, vegetation, weather, water, ambient lighting and shadows combine to reinforce its immersive realism.

Can you explain what MegaTexture technology brings to the game?

The all-new MegaTexture technology renders the entire battlefield untiled and unbroken to the horizon, representing over a square mile of unique terrain with inch-level detail. However, the MegaTexture technology was not designed purely for visuals. Special properties are derived from the MegaTexture that allow realistic friction on surfaces. Vehicles slide on gravel or wet roads, but have better handling on dry pavement, while vehicles driving over dirt produce more dust than a vehicle driving on pavement or rock.

What terrain can we expect to see?

There are three themes in development: Temperate, Arid and Arctic. These are then augmented by unique geographical locations, individual mission plots, and unique objectives. Each mission takes place in a completely unique environment, with a different time of day, year and atmospheric conditions.

Finally, just where does the game fit into the *Quake* timeline?

Enemy Territory: Quake Wars is set in the *Quake* universe as a prequel to the *Quake II* and *Quake IV* games. It portrays the original Strogg invasion of Earth, pitting the armies of Earth's Global Defence Force (with their conventional military weapons) against the invading alien Strogg and their advanced weapons technology. *ETQW* might be thought of as *Quake Zero*. ∎

1. Enhanced gaming: A trio of soldiers prepare to descend on an enemy outpost. An enhanced version of the groundbreaking *Doom 3* game engine and new MegaTexture technology give such scenes richer visual detail than PC gamers have ever seen.

3. Advanced technology: *Enemy Territory: Quake Wars* features a huge range of air and land-based vehicles. The enemy Strogg have access to spectacular new technologies.

3. World war: Footsoldiers dodge the lethal rain from above to take cover in a massive troop carrier. The scale of the warfare in *Enemy Territory: Quake Wars* is jaw-dropping.

4. Close-up detail: The model complexity and incredible shader work used by Enemy Territory: Quake Wars harnesses the power of NVIDIA to bring the explosive combat to the screen in stunning detail. Players not only get to see the whites of each soldier's eyes, they can also appreciate the laces on their boots!

Dark And Light

Publisher: **Farlan Entertainment** Developer: **NPCube** Release: **Out now**

Bigger isn't always better, but when *Dark And Light* is able to boast the largest seamless game environment *ever* created for a massively multiplayer online game, it's hard not to be impressed!

Already tried and tested by close to a quarter of a million beta testers, *Dark And Light*'s forty thousand square miles of lush landscapes present an incredibly vast and diverse environment in which gamers can take part in the ultimate battle between the forces of good and evil. Here players can manage their own fortress, traverse the land by harnessing mythical beasts, and evolve their characters both politically and in combat. Gamers even get to carve out their own storylines, creating events and initiating their very own conquests, while scriptwriters including role-playing legend Gary Gygax

are also on hand to pen compelling new tales. Brought to life using the custom Mafete 2.0 game engine, *Dark And Light* aims to give role-playing fans the biggest, most immersive, and satisfying alternative universe to date. For more information on this unbounded world, visit the community website: **www.darkandlight.net**. ■

Lose yourself: The vast yet detailed world of *Dark And Light* sets new standards both in terms of size and detail, thanks to its TWIMTBP-approved Mafete 2.0 game engine.

Case study: El Matador

Publisher: **Ascaron** Developer: **Plastic Reality Technologies** Release: **June**

Packing in all the intrigue, action and drama of a multi-million dollar Hollywood blockbuster, *El Matador* is an incredibly ambitious action adventure. Taking in environments inspired by real locations in Costa Rica, Cuba and Columbia, it casts gamers in the role of a DEA agent out to bring down an organised crime syndicate.

Yes, it's another one-man-against-the-world scenario, but what makes El

Matador different is its ability to combine free-roaming environments with a story that's blessed with cool set-pieces and inspired plot twists. Then there's the visual side. Not since Far Cry has a game brought tropical outdoor environments so effectively to the PC screen, with the interactive environment featuring great physics, high resolution textures and a wealth of advanced graphical techniques, including Microsoft DirectX 9.0-based bullets, cascaded shadow maps and per pixel atmospheric scattering.

The jargon may not mean much, but the end result will. From the mouth of Petr Smílek, Plastic Reality Technologies: "The hardware shadow mapping support has enabled us to create high-quality shadowing, even for extremely complex scenes." ■

> "Not since *Far Cry* has a game brought tropical settings so effectively to the PC screen."

Bring them down: Victor Corbet is a special mission agent, whose task is to eliminate the boss of drug gang La Valedora and destroy this drug cartel. His fellow fighters are members of Bogota Anti-drug Department. Together they need to face the drug mafia in a bloody single-winner fight.

The real deal: Advanced 3D techniques, including virtual displacement mapping, shadow masks and global lighting are all utilised to stunning effect in *Call Of Juarez*.

Feel the saddle sore: Organic elements such as vegetation, fire and smoke are brought to life with a combination of physics simulation and Shader Model 3.0 coding.

Stand and deliver: A world away from other first-person shooters, *Call Of Juarez* recreates the grit and gunplay of 19th Century America in spectacular fashion.

Wicky wa wa: *Call Of Juarez* makes use of Techland's latest Chrome Engine. Enhanced with the help of NVIDIA, this boasts advanced per-pixel lighting and rendering techniques, including high dynamic range environment mapping for cinematic views.

Call Of Juarez

An epic western-themed adventure. We can't wait!

Publisher: **Techland** Developer: **Techland** Release: **To be confirmed**

As with the best Western movies, the story at the heart of *Call Of Juarez* is one of revenge, honour and tragedy. The tale begins when notorious brawler, Billy, returns to the family home two years after a fight with his stepfather, only to discover that his entire family has been slain. Fuelled by revenge, he sets forth on a journey to find the killers and bring them to justice – by the law of the gun. Running parallel to this is the story of Ray, a former gunfighter turned pastor, and brother to Billy's stepfather. He too heads out in search of revenge for the murders, but with the belief that Billy is the killer. It's only a matter of time before innocent blood is spilled.

Cleverly giving players the opportunity to alternate between the roles of the fugitive and his hunter, the game creates a uniquely involving and complex narrative. It also piles on the tension, with the emotion and psychological elements building as the game progresses. Then, of course, there's the opportunity to play two very different characters, which gives the gamer a wider range of experiences within the beautifully detailed world. From breathtaking horseback rides and fast-paced revolver duels to stealthy town-based missions and cool stunts, *Call Of Juarez* enables gamers to live out just about every cinematic cowboy fantasy possible.

Wild at heart

Making use of the latest version of the Chrome game engine, *Call Of Juarez* also uses the latest NVIDIA-supported features in order to render the action in all its stunning glory. Wide vistas stretch to the horizon with advanced light scattering techniques. This ensures that each and every rolling hill, every blade of grass, and every wooden building is as realistically drawn as possible. An advanced physics system is also integrated with the 3D engine, helping to bring fire, water, smoke and dust to life, as well as ensuring the best possible character animation through the use of 'rag-doll' physics.

Few games have dared step into America's golden age of cowboys, outlaws, and gunfights. It may be a period of heroes and villains, but it's also rich in the sort of visual and story detail that's extremely difficult to bring to the PC screen. With *Call Of Juarez* making the most of NVIDIA's GeForce technology, the PC is finally ready to take on the Old West in style. ■

Pawel Zawodny, Techland "The game uses the newest version of our Chrome Engine. With close co-operation with NVIDIA it's been improved to utilise Shader Model 3.0 and support per-pixel lighting and advanced rendering techniques."

Flight Simulator X

The most famous simulation series of all time makes a triumphant return. Now you can truly fly the world!

Publisher: Microsoft Game Studios **Developer: Microsoft Game Studios** **Release: Late 2006**

Eye candy: The landscape is modelled with 16 times more detail than in the previous edition of *Flight Simulator*. Coupled with more ambitious artwork and advances in 3D shader technology, it makes scenes such as this a feast for the senses.

Chopper and change: The game features more than 24 different kinds of aircraft, including helicopters, which present a very different challenge for the armchair pilot.

In the evening: Day prepares to make way for night in a stunning showcase of the advanced lighting effects.

The PC has been home to some wonderful games franchises over the years, but none can match the heritage of the *Flight Simulator* series. The first one touched down 25 years ago, giving gamers of the day their very first taste of an experience that most of us never get the opportunity to sample out in the real world.

Since that memorable debut, successive editions have continued to set the pace, evolving to reflect advances in

"Virtual pilots can fly absolutely anywhere, taking in the views as they fly over seven vastly different continents"

computer technology and growing ever more accessible. Now, two years since the series' last flight, this latest version is about to transform the aviation genre once again. Capitalising on the massive leaps in PC graphics and processing technologies, it presents a virtual world far in advance of anything flight fans have ever seen before.

New developments

Microsoft Game Studios, the team tasked with the prestigious and demanding task of bringing the new *Flight Simulator X* to fruition, is Microsoft's own award-winning specialist development studio. This new title is thus the culmination of a quarter of

a century's worth of game development, a near incalculable number of man-hours, and the combined talents of some of the finest minds at the world's foremost developer of PC software: Microsoft.

What's more, MGS has also enjoyed massive successive with the *Combat Flight Simulator* titles, and so has built on the tricks and techniques learned developing this wartime series. The team has also been able to develop the game to take advantage of Microsoft's new Vista operating system, while also pushing current editions of Windows to the max.

The real joy of *Flight Simulator* games has always been the ability to take off and

head out over real-world landscapes, soaking up the atmosphere and enjoying the realistic plane mechanics. *Flight Simulator X* is no exception, enabling gamers to instantly take to the skies, but for the first time it also introduces a more structured gameplay.

More than 55 missions, including skill-based flying tests and point-to-point flight plans, have been crafted to test your skills. From those embarking on their first solo flight to past masters of prop planes, airlines, helicopters and more, *Flight Simulator X* has multiple challenges in store. And with a completely reworked multiplayer element, the online side of the simulation benefits from even greater interactivity and structure.

More choices

This simulation also offers greater scope and variation than its predecessors, thanks to the inclusion of more than 20 wildly different aircraft. From modes of flight as basic as an 'ultralight', through classic seaplanes like the Havilland Beaver and Brumman Goose, to favourites like the Cessna 172, and on up to the most popular passenger airliners, there's an aircraft to suit the tastes of every player as well as every type of mission.

Down at ground level *Flight Simulator X* exceeds all expectations, with a map that features 16 times more detail than in the previous edition. Virtual pilots can literally fly absolutely anywhere, taking in the

Heavy weather: The rain beats down on the runway as a Boeing jumbo begins to taxi in readiness for take-off. The world's major airports are modelled in incredible detail, and with more than 24,000 airports worldwide, players will never be short of somewhere to touch down.

views as they fly over seven vastly different continents. From alluring tropical hideaways to cities featuring unique landmarks and colossal skyscrapers, *Flight Simulator X* utilises the extra storage space offered by its DVD-only format to put a whole world in the player's hands, not to mention more than 24,000 different airports. With such detail and scale, every gamer will have the opportunity to fly right over their own hometown, even navigating using the layout of the streets below!

Realistic flights

Flight Simulator X also presents huge advances in terms of graphical clarity. 3D detail stretches right off the horizon, while the advanced lighting engine means that glint and glare is visible as the sun hits the paintwork, chrome and glass on each aircraft.

And the days of sterile environments are long gone. In addition to complex cloud modelling and weather simulation, this world is also alive with the activities of man and beast. Flocks of birds can be seen flying through the air, dolphins play in the oceans below, and even the roads are active with the traffic.

More than merely the most advanced aviation game to have been developed, *Flight Simulation X* also serves as a technical and graphical benchmark for the whole PC gaming scene. Flying the friendly skies has never been such an attractive proposition. ■

Pilot test: In addition to free flight and multiplayer modes, *Flight Simulator X* features 55 different missions. Each presents fresh challenges based around different aircraft – from gliders through to passenger airliners.


World view:
Visit the world's most beautiful cities and take in the sights in *Flight Simulator X*. No other game delivers such stunningly detailed and realistic real-world views.

Deep blue:
Amazing water effects glint and ripple in the accurately modelled world of *Flight Simulator X*. Dynamic lighting techniques ensure such scenes possess a startling photoreal quality.

Tilt and joust:
Remote camera views give gamers the opportunity to appreciate the highly detailed landscapes and aircraft for all manner of entertaining angles.

Stick figures:
Practise your flying and landing skills on all kinds of aircraft, including classic propeller-driven seaplanes.
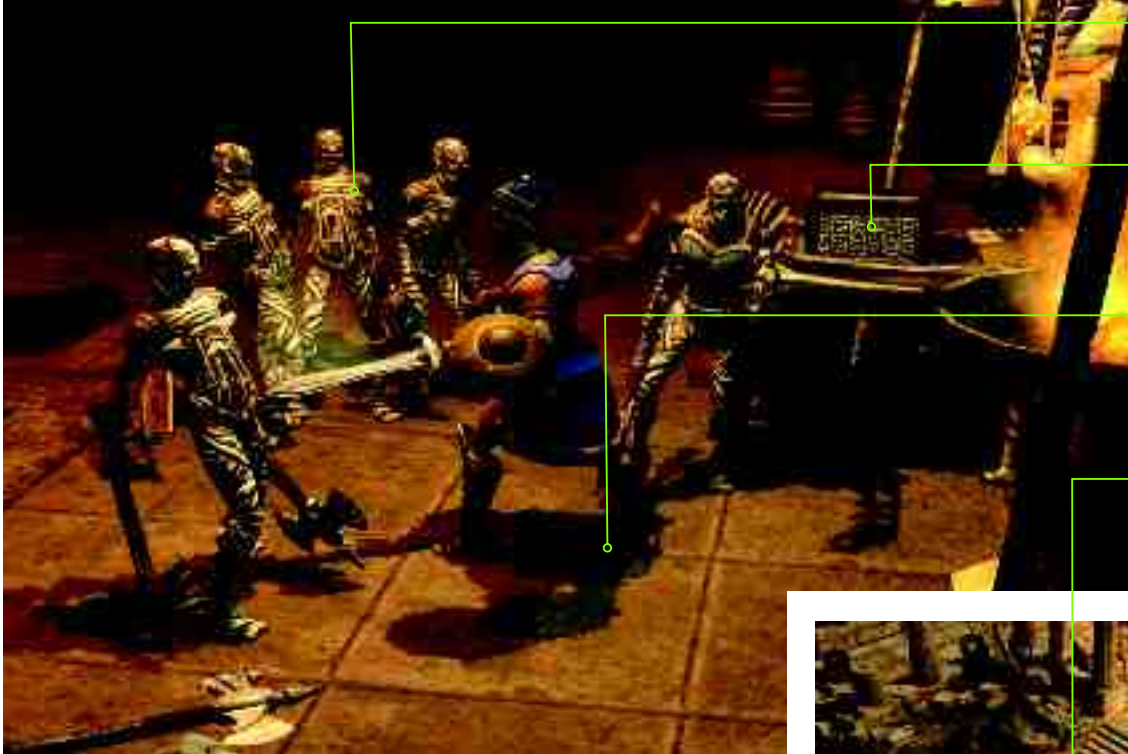
The stuff of legends:
Incredibly high detailed texturing and advanced shader work brings the characters and locations of Greek and Egyptian mythology to life in *Titan Quest*.

Tons of treasure:
Treasures are there for the taking in *Titan Quest*, with masses of unique loot to plunder and more than a thousand equipment types to utilise.

Light and shade:
Titan Quest makes the most of NVIDIA's Microsoft DirectX 9.0 support, with real-time lighting and shadow effects adding extra depth to the overground and subterranean locations.

Up close and personal:
Fully scaleable viewpoints make it possible to get very close to the bad guys, so you can deliver the most precise blows possible in fast-action combat.

Titan Quest

The world of ancient myth comes brutally to life

Publisher: **THQ** Developer: **Iron Lore Entertainment** Release: **June**

As co-author of *Age Of Empires* Brian Sullivan helped revolutionise the point-and-click genre. With Iron Lore Entertainment he's turned his attention to the world of role-playing and shaken it up with a sword and sorcery-filled tale of mythical ancient Greece and Egypt. Secretly in development for almost two years, *Titan Quest* is at last ready to wow the PC gaming world.

Blending fast arcade-style action and addictive role-playing elements in a visually-focused way, this opus has been designed from the ground up to be enjoyed by fans of

Brian Sullivan, President, Iron Lore Entertainment: "*Titan Quest* takes advantage of NVIDIA GPUs to deliver an incredible gaming experience for the adventure of a lifetime."

"The lavish artwork imbues locations with photo-real gloss, intricate detail and fluid animation."

both genres and to appeal equally to solo adventurers and multiplayer gamers.

Titan Quest evokes a time of deities, monsters and heroes. The story sees the Titans – 'gods before the gods' – escape their eternal prison to wreak havoc on the world. As these gods embark on a war with their younger successors, humankind is caught in the middle and, as in classic mythology, it's up to a hero to save the day. By journeying to the maze of Knossos, the Parthenon and the Hanging Gardens of Babylon, this lone saviour must uncover the secret to sending the Titans back.

It's an epic tale that harks back to classic movies like *Jason And The Argonauts* and uses every graphical trick in the book to bring the ancient to life. Streaming techniques create a seamless, freeflowing world, while the lavish artwork imbues every location with a photo-real gloss and brings every creature to life with intricate detail and fluid animation.

The game is easy to delve into but *Titan Quest* has been specifically designed to offer genuine depth. Integrating role-playing elements without sacrificing the fast-action gameplay, it features a flexible character class system so players can develop their characters in a vast number of ways. By building up a range of skills, heroes can further customise their abilities. And with over a thousand pieces of unique equipment available in total, combat becomes an equally personal and spectacular affair. ■

Panzer Elite Action

Publisher: **JoWood** Developer: **Zootfly** Release: **June**

The Devil in the detail: Blessed with help of the latest NVIDIA-supported features, *Panzer Elite Action*'s 3D engine brings every military unit, bombed-out building and blade of grass to life with unrivalled detail, gloss and clarity.

Fans of action-based wargames have had to wait some time for a fresh opportunity to head on to the battlefields. But with its rare combination of cutting-edge visuals and historical realism, *Panzer Elite Action* more than justifies the wait.

Recreating the brutal combat conditions of World War II in unmatched detail, *Panzer Elite Action* gives gamers the opportunity to fight from three vastly different perspectives – as an American commander pushing on after D-Day and ultimately driving victoriously across the Rhine, as a German commander working towards a showdown at Stalingrad, or as a Russian commander turning the tables on the enemy and driving the Germans back at Kursk.

In each campaign the challenge builds smoothly, with increasingly powerful tanks on hand and the opportunity to lead an entire squadron, while the battles become more intense and explosive. With the single player narrative augmented by numerous multiplayer options and the 3D engine adding an almost photo-real sheen to the gorgeous environments and intense battles, *Panzer Elite Action* is even accessible enough to appeal to the war-hungry first-person shooter crowd. ■

Case study: Spellforce 2

Publisher: **JoWood** Developer: **Phenomic** Release: **May**

The original *Spellforce* ushered in a new era for real-time strategy fans, blending familiar ideas with role-playing and careful storytelling to put a whole new spin on the genre. These ideas are developed further in this sequel, which is a game of spectacular scope and scale. The Avatars can play a direct role in the story, using a mix of direct control and point-and-click to explore, cast spells and battle enemies. The game cleverly builds on this immersive design, gradually introducing strategy elements until a band of heroes, and then entire armies, are also under player control. With monsters growing in size, strength and number as the story progresses, gamers will need the skills of a commander and the bravery of a hero.

As committed as it is to pushing forward the approachability and mechanics of the genre, *Spellforce 2* also features a game engine that is adept at depicting large-scale vistas and over-the-shoulder views of the action. Boasting high poly counts and a wealth of Microsoft DirectX 9.0-based graphical techniques, this is easily one of the most visually impressive role-playing titles available. ■

Complete control: Role-playing and real-time strategy combine seamlessly and spectacularly in the visually ambitious sequel, *Spellforce 2*.
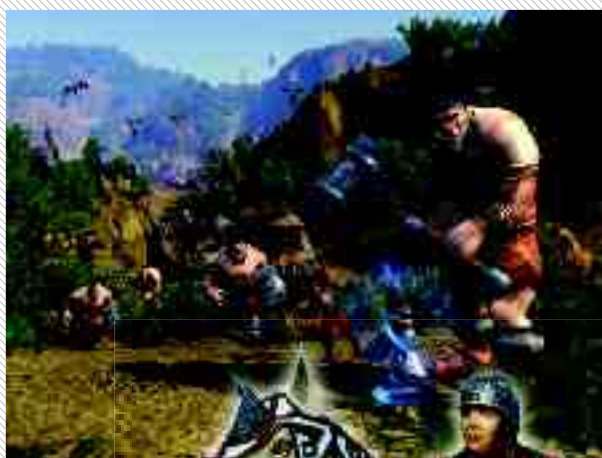
Rise Of Nations: Rise Of Legends

Journey to another world in Brian Reynolds' incredible new strategy epic

Publisher: **Microsoft Game Studios** Developer: **Big Huge Games** Release: **May**

It's been three years since Brian Reynolds, designer of such classics as *Alpha Centauri* and *Civilization 2*, unveiled his most ambitious empire-building strategy game to date. *Rise Of Nations: Rise Of Legends* is so much more advanced that the tag 'sequel'

Devil in the detail:
Rise of Legends looks amazing, but there's no compromise on gameplay – a whole fantasy world is yours for the taking.

doesn't even begin to sum it up. The original *Rise Of Nations* recreated 6,000 years in the history of man, while this title takes gamers to the land of Aio, a world embroiled in an epic battle between the forces of Technology and Magic.

This may be a fantasy game, but it's totally unlike any you'll have seen before. Taking inspiration from Leonardo Da Vinci and *Arabian Nights*-era design, the game presents an artistic vision of Aio and the war that rages on its landscape. From towering cities to flame-swept deserts, this is a game filled with mystical creatures, impossible machines and incredible feats of magic.

This is no simple story of good versus evil. Following the adventures of Giacomo, the game spans three continents. Waging a war of survival and encountering a unique

cast of characters, Giacomo must unravel the world's ancient past and unite its peoples to fight off an unimaginable new threat.

Rise Of Legends includes both instant action and open-ended 'Conquer The World' modes. There are also empire-building opportunities, with the ability to amass huge armies, construct whole cities and research new discoveries to help your armies win through in the conflict.

This is a huge leap forward for the real-time strategy genre, thanks to a brand new 3D engine that really transports the action to another world, with exquisite lighting and intricately detailed buildings.

Technically groundbreaking and inventive, *Rise Of Nations: Rise Of Legends* is set to be another classic from games guru Reynolds and his team at Big Huge Games. ∎

1. Epic battle:
The *Rise Of Nations* series leaves the confines of Earth to depict a war between magic and technology on the beautiful world of Aio.

2. Real action:
Rise Of Legends introduces a brand new 3D engine, transforming the real-time strategy genre with dynamic lighting, high detail models and glossy shader effects.

3. Vast cities:
From humble beginnings, players can construct massive cities and empires that stretch across the incredible landscapes.

4. New characters:
A new world brings with it completely new unit types and gameplay possibilities. Each faction's army possesses its own unique weapons, technologies, strengths and weaknesses.

Pirates Of The XXI Century

Publisher: **To be confirmed** Developer: **Diosoft** Release: **To be confirmed**

Cinematic scenes: Powered by the cutting edge DIOengine, *Pirates Of The XXI Century* excels at depicting tropical environments, realistic water, and high-detail characters and creatures.

In addition to partnering some of the world's largest games companies, NVIDIA is also committed to working with some of the most exciting new development teams around the world, ensuring that the next generation of original gaming titles are true TWIMTBP experiences.

Diosoft is one such outfit and its *Pirates Of The XXI Century* is a hugely original and graphically stunning debut title. Set in an alternative reality inside the Bermuda Triangle, it depicts an environment whose deadly threats are at odds with its sun-kissed appearance.

It's a brilliantly cinematic concept and one given suitably filmic treatment, thanks to a powerful new 3D engine developed by Diosoft specifically to generate complex real-world environments and a wide range of high-end shader and lighting effects.

Get ready for scenes blessed with incredibly realistic water surfaces and underwater environments, per-pixel lighting and shadows with High Dynamic Range textures, dynamic weather systems, day-to-night transitions, clouds, smoke, particle-based fire, physics modelling, and even fur simulation. This is definitely one to watch! ■

Case study: Just Cause

Publisher: **Eidos** Developer: **Avalanche Studios** Release: **October**

From Sweden's Avalanche Studios, a new outfit formed by talented people who worked on such acclaimed titles as *Chronicles Of Riddick*, *Battlefield* and *Headhunter*, *Just Cause* combines exceptional proprietary technology with a wild, nail-biting, and frequently explosive story.

In the guise of CIA operative Rico Rodriguez, gamers are tasked with a mission to bring down the corrupt president of the South American island of San Esperito. This is no simple assassination mission, though. Instead, it's Rodriguez's job to infiltrate guerrilla squads, drug cartels and more, pushing the various factions against one another to produce incendiary results.

"Our vision for Just Cause was to create a realistic game world where players can unleash their creativity, in order to bring down a regime using any means possible," explains Christofer Sundberg, director at Avalanche Studios. "We wanted to provide the player with near endless opportunities to play missions, explore the world, and perform stunts using land, sea and air transport."

To this end Just Cause utilises a 3D engine purpose-built from the ground up, in combination with lavish art and game design, to create an incredibly vibrant world. The island of San Esperito is made up of over 1,000 square miles of mountains, jungle, beaches, villages and cities – all fully explorable, using the widest range of vehicles ever seen in a game! ■

Amazing world: Sun-kissed action epic *Just Cause* marks an auspicious TWIMTBP debut for new development team Avalanche Studios. Gameplay takes place in all-new maps or two player split-screen action.

Heroic task: From villages along the beach to mountains and jungle, CIA operative Rico Rodriguez must bring down the corrupt president of South American island San Esperito.

The 6150 Notebook Chipset Solution

## NVIDIA brings on-board graphics to the High Definition party

The award-winning GeForce Go graphics processing units (GPUs) have undoubtedly changed the face of portable PC computing, spelling an end to the era when PC users on the move had to be satisfied with second-class 2D and 3D graphics processing. Most recently NVIDIA has turned its attention to integrated chipsets, combing the power of GeForce Go and nForce media and communications processor (MCP) technology to create the 6100 and 6150 Notebook Chipset Solutions.

Previously, users who opted for a low-cost integrated graphics solution to achieve a lighter, more power-efficient machine have been forced to sacrifice graphics and video performance. Now NVIDIA's 6150 delivers on-board graphics without compromising on High Definition (HD) capability.

Best in class
Boasting a range of standard-setting performance features, the 6150 Notebook Chipset Solution is based on the NVIDIA GeForce Go 6150 GPU and nForce Go 430 MCP. That means you can enjoy graphics rich applications, smooth DVD playback
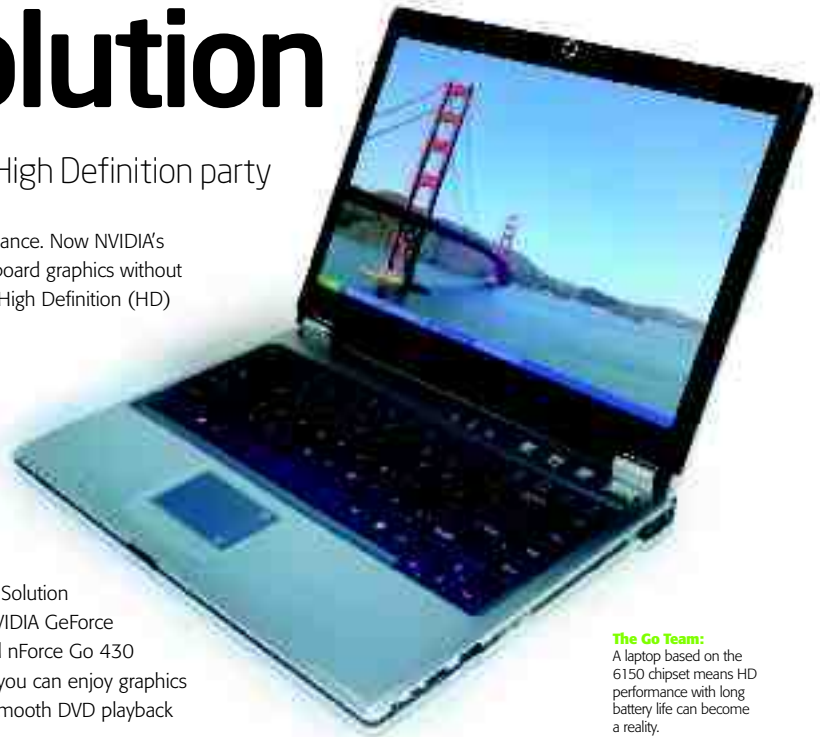
The Go Team:
A laptop based on the 6150 chipset means HD performance with long battery life can become a reality.

and outstanding system performance for longer, wherever you are.

Serious quality
With the GeForce Go 6150 GPU on board, this is the first time that notebooks based on an integrated chipset will have all the benefits of NVIDIA's market-leading PureVideo solution. And thanks to its advanced PowerMizer power management technology, crystal clear HD playback doesn't come at the expense of battery life. Its graphics capabilities also mean the 6150 Notebook Chipset Solution is fully compatible with Microsoft's new Vista operating system, so you'll be ready to experience the full potential of Windows' next generation. ∎

> "The 6150 delivers on-board graphics without compromising on HD capability"

GF6150 key features

NVIDIA PureVideo Technology: Turns a notebook into a home cinema, with unprecedented picture clarity, smooth video, accurate colour and precise scaling of video content.

High Definition: Provides hardware acceleration of MPEG-2, WMV, and h.264 video, with minimal CPU usage for longer battery life.

Integrated HDTV Encoder: Use your HDTV as a display for watching movies, surfing the web or playing games in high definition.

DirectX 9.0 Shader Model 3.0 Support: Enables gamers to enjoy the cutting edge effects found in the latest (and next) generation of games.

NVIDIA nForce Go 430: Integrates with this media and communications processor to bring the award-winning NVIDIA nForce 4 family to the portable arena. nForce Go 430 delivers outstanding system performance and longer battery life on AMD Turion 64 processor-based notebooks.

HyperTransport Technology: For continuous throughput up to 8.0GB/s between the GeForce Go 6150 and NVIDIA nForce Go 430 MCP.

Advanced Temporal and Spatial De-Interlacing: Smooths video and DVD playback on progressive displays to deliver a crisp, clear picture that rivals dedicated high-end home cinema systems.

Video Scaling and Filtering: High-quality scaling and filtering technology delivers a clear, clean image at any window size, including full-screen HDTV resolutions, such as 720p.

Video Colour And Gamma Correction: For video that looks natural, rather than washed out and pale, when playing videos on LCD and CRT displays.

PowerMizer Technology: Advanced hardware power management technology reduces notebook power consumption to deliver the longest battery life of any Turion platform solution.

GameTap

Forever changing the way PC users access and play videogames...

1

2

1. Get control: Each game in the GameTap library carries its own easily accessible 'InfoCard'. This provides everything from tips and control instructions, to parental ratings and top scores from players.

2. The whole spectrum: Featuring everything from 1970s arcade classics through to recent hits like Ubisoft's *Beyond Good And Evil* (pictured), Gametap is packed with millions of hours of game enjoyment.

Ease of navigation: Navigating through GameTap is simplicity itself, thanks to the interactive 3D menu systems and a wealth of on-screen information.

G **aming has experienced massive** changes over the last few years. Every technological leap has resulted in ever-more ambitious and fulfilling titles. But one thing that has remained constant is the way we access those games: we head out to a shop, choose the one we want to buy, then bring it home and start playing. Until now that is. With the arrival of the internet, the NVIDIA-supported GameTap changes all that, and introduces a whole new era of gaming on demand.

GameTap is a website that enables you to have all the greatest ever game consoles wired right into your PC. From console games to PC games to arcade games, GameTap plays them all, and they're all easily accessible directly from your home PC. All you need is a suitable Broadband-connected home PC.

What's more, GameTap has been designed to give subscribers more bang for

their buck than even the most avid gamer can handle. Although initially only available to gamers in the USA, this is clearly just the beginning of a new gaming revolution.

Getting started with GameTap is simplicity itself – just download the specially developed software, boot it up and the GameTap world opens up to you. Acting as a gateway to the GameTap vault, this program lets the user delve into a massive library of games, with cleverly organised 'levels' offering ease of navigation through genres, hot picks, all-time favourites and so on.

Best of all, the GameTap experience means that gamers no longer have to pay

for each individual title. A monthly subscription covers access to the entire game vault. As an added bonus, subscribers can choose to play as many titles as they like, as often as they like. That library of games just keeps on growing, too, with just about every publisher signing up to provide content. From Activision and Atari to Eidos and Electronic Arts, Namco, Sega, Ubisoft and Vivendi, almost 1,200 titles have been licensed so far.

If you like the sound of this, why not find out more by visiting the GameTap website for the latest news and updates? Just go to **www.gametap.com** ■

Classics At Your Fingertips

T **here are more than 400** casual games now available from GameTap, ranging from console classics to PC games. Some are simple pick-up-and-play titles, others are gems just waiting to be rediscovered. As you would expect from a 'casual gaming' site, genres such as pinball, board games, platform titles and arcade veterans are well represented. Here's a selection:

■ *Beyond Good & Evil* (Ubisoft)
■ *Bubble Bobble* (Taito Corporation)
■ *Defender Classic* (Midway Home

Entertainment, Inc)
■ *Earthworm Jim 2* (Interplay)
■ *Heroes of Might and Magic I-IV* (UbiSoft)
■ *Impossible Mission II* (Ironstone)
■ *Lego Racers 1* and *2* (LEGO)
■ *Myst Uru: Ages Beyond Myst* (UbiSoft)
■ *Planetfall* (Activision Publishing, Inc.)
■ *Prince of Persia: The Sands of Time* (UbiSoft)
■ *Railroad Tycoon 3* (Take-Two Interactive)
■ *Tomb Raider* (including *Chronicles* and *Angel Of Darkness*) (Eidos)
■ *Worms Armageddon* (Team 17)

1. More mayhem: Working with NVIDIA to blend its industry-proven simulation technology with the latest GPU know-how, Havok has created a toolset capable of simulating complex collision and particle effects. Enjoy maximum performance playing games that boast incredible physics modelling.

2. Mad monsters: *Hellgate: London* is a game based in a gorgeously detailed Gothic, post-apocalyptic London.

3. Guns and tanks: *The Outfit* is a WWII squad-based combat game.

4. The Dungeon Master: *Dungeons & Dragons Online* is the ultimate adventuring MMOG.

5. Driving in my car: *Auto Assault* by NetDevil is an action-based online game that combines vehicular combat with role-playing elements.

6. Kill 'em all: *SWAT 4: The Stetchkov Syndicate* sees a world inhabited by gangsters, guns and drugs. It's your job to take the baddies down.

Havok FX

Game developers can now wreak more havoc than ever

Publisher: **Havok** Developer: **Havok** Release: **Summer 2006**

Havok's products are not something you can play. You can't even buy them. Yet their software is undoubtedly one of the best things to happen to PC gaming in the last few years. And it's all because of physics...

From the way the body of a bad guy crumples to the floor when shot, to the action of gravity on a wall when shattered by a dragon's claw, physics adds a degree of realism and incredible subtlety to the gaming experience. Unfortunately, this kind of real-world modelling has often been considered too complex or time-consuming, to implement properly. But with Havok, game developers can free up resources and concentrate on making their games as good as possible. Compare the disappointingly fake animations and behaviours in a lot of games to those enhanced by Havok software and you'll see the difference.

"Havok FX can create large-scale particle effects that impact other objects and characters."

Box of tricks

Integrating with the Havok Complete system, Havok FX is designed to simulate the physical properties of real-world object collisions – and not just the interactions between a handful of objects. In fact, Havok FX is able to simulate collisions between thousands of objects. With support for 'debris primitives', Havok FX is able to blend real-time shading effects with all-important physics elements to create large-scale particle effects that actually impact on other objects and characters – including the player. And by utilising the power of Shader Model 3.0 class graphics, it's able to capitalise on the latest NVIDIA GPU chipsets.

With NVIDIA providing the muscle for the creation of fluids, smoke, fire, debris and rigid body physics, the CPU is free to deal with the rest of the game code. As a result, NVIDIA owners playing Havok FX-enhanced titles will benefit from the fastest, most realistic and immersive game experiences possible. **www.havok.com** ■

Tyler Thompson, Technical Director of Flagship Studios: "With Havok FX, we can explore new types of visual effects that add realism into *Hellgate: London*. Given the widespread installed base of GPUs and the incredible performance of the new NVIDIA GeForce 7900 GTX and GT GPUs, Havok FX was a natural choice."

PowerDVD MPEG-4 AVC Pack

Boasting award-winning audio and video technology, Cyberlink's PowerDVD system has already established itself as one of the world's most popular DVD playback applications for the PC. And now its video playback capabilities have been improved even further, with the release of Cyberlink PowerDVD 6, the new MPEG-4 AVC pack.

This is so much more than just an upgrade, though, with this pack including full support for NVIDIA PureVideo Technology. This means that PowerDVD owners with NVIDIA GeForce 6 or GeForce 7 graphics card can now benefit from H.264 video hardware acceleration.

This cutting edge technology dramatically reduces the load placed on the user's CPU during video playback – by as much as 50 per cent – when streaming high-definition footage. Partnered with the program's many other industry-leading features, it enables PowerDVD to turn a PC into a true high-definition powerhouse. **www.cyberlink.com** ■

More power: Now with added support for NVIDIA PureVideo H.264 technology, Cyberlink's PowerDVD gives users the best high-definition playback available.

Case study: Nero 7 Ultra Edition

Ten years on and Nero continues to go from strength to strength, with more than 200 million users worldwide making use of the company's powerful yet accessible digital media solutions. With the arrival of Nero 7 Ultra Edition, the standard has been raised yet again. Nero 7 is designed to meet all your digital media needs – from capture, creation and editing, through to authoring, burning, backing-up and sharing. The Ultra Edition adds three new tools, bringing the total number of utilities to an astonishing 18. These include: Nero Home, a brand new media manager system; Nero Recode and Nero Vision, core programs that make creation of CD, DVD and high-definition video content as easy as possible. Then there's Nero ShowTime, a HD-compliant playback program designed to make the most of NVIDIA H.264 video acceleration technology and deliver smooth and rock-steady video quality on the PC. Together it forms a suite of software that's as suited to occasional disc burners as HD directors. Check out the 30-day free trial version, which is available now at www.nero.com to see how Nero and NVIDIA can help streamline, simplify and accelerate all your digital media work. ■

Jam packed: Nero 7 now includes an additional three programs, bringing the total number of programs to a staggering 18.

Crystal clear: Nero 7 Ultra Edition includes Nero ShowTime, a playback utility with support for NVIDIA H.264 acceleration. This ensures perfect playback.

Burn: The Ultra Edition is suited to everyone, from the occasional disc burner to the HD director.

Complete control: Nero 7 is designed to meet all your digital media needs – from capture and editing to authoring, burning, backing-up and sharing.

Windows Vista is coming

The new version of Windows is finally upon us, and it's bringing a wealth of improvements. Take a tour round Microsoft's newest baby, with Jon Hicks, deputy editor of Windows Vista: the Official Magazine

Back in 2001, NVIDIA's latest card was the GeForce 3, Apple was about to launch an unusual little music device called the iPod, and there was a brand new version of Windows: Windows XP. Five years down the line and the computing world has changed dramatically. What's more, after a long time in development, Microsoft has a new operating system: Windows Vista. It's arriving to great fanfare early next year, and you can expect it to be supplied as standard on all new PCs.

As the new, snazzier name might suggest, Microsoft's latest offspring has been designed to be more appealing and more exciting, while offering big improvements in terms of performance and usability.

"Vista monitors the way you use your PC and automatically tweaks things to run at top speed."

Tasty new Aero

The most obvious change is a new interface called Aero. Although still recognisable as the standard Windows desktop, this has been redesigned to tap into the tremendous power of the latest graphics cards, while being more attractive and easier to use. Windows are now glossy, transparent creations that you can flip through in 3D, and you can immediately see what any file is just by looking at it. Boring old icons have been replaced by tiny thumbnails of each document, and you can expect your photos to look much better, too, thanks to built-in features for adjusting exposure, removing red-eye and just plain organising your snaps.

It's not just photos that are easy to find, though. The Start Menu is no longer a vast, sprawling catalogue that fills the screen, but a simple list with a search box at the bottom. Search is built into every corner of Vista and it starts working the moment you start typing into the box. There's also a new Desktop Sidebar – a strip down the side of the screen that hosts mini-applications called 'Gadgets'. These are small and simple but incredibly useful programs that give you at-a-glance updates on your programs and websites.

Under the bonnet

This glamorous exterior conceals a huge number of new features and technologies lying underneath. One of the most significant is security; stung by several years of criticism over its safety record, Microsoft has designed Vista with a stringent set of security controls that make it impossible to install programs without an administrator password – stopping spyware and viruses in their tracks.

The new version of Internet Explorer supplied with Vista is similarly canny, automatically warning you of suspicious websites and throwing a wobbly if your security is compromised.

Speed demon

The other great PC obsession: performance, is also vastly improved. Vista monitors the way you use your PC and automatically tweaks things to run at top speed. This is joined by support for what must surely be the world's easiest hardware upgrade: just plug in a USB memory stick and Vista will be able to use it as system memory.

If all that sounds appealing, then good news: we've only scratched the surface of the full list of new features. We'll be looking in more detail at the graphics improvements and the power of the new DirectX10 in the next issue of *The Way It's Meant To Be Played*, but in the meantime you can keep up with the latest developments in every issue of *Windows XP: The Official Magazine* and its new stablemate, *Windows Vista: The Official Magazine* – it's an entirely new computer magazine that'll show you how to unlock the potential of these new features. Look out for the first issue this summer. ∎

Jargon buster

3D Flip: This is a 3D view of all your open windows and programs, which you can flip through like a Rolodex.

Aero: The new Vista interface is similar to the current Windows XP style, but it taps into the power of your graphics card to add 3D effects, animations and much more.

DirectX 10: The new version of DirectX supports the very latest graphics technologies and enables the next generation of PC games.

Sidebar: A new panel on the side of the Vista desktop enables you to arrange handy shortcuts and mini-applications called Gadgets.

Gadgets: These are mini-programs that can live either in the Sidebar or on your desktop. They can serve all sorts of purposes; you can view sports results, check your calendar, get a weather forecast and much more.

IE7: The new version of Internet Explorer that comes with Vista adds a built-in search, tabbed browsing, support for RSS news feeds and a host of security and anti-phishing features.

SideShow: This is a tiny screen built into the case of laptop PCs that enables you to glance at important information without switching on your laptop. It can display things like calendar information, wireless signal strength or a music playlist.

Sleep: This is a new almost-off power state that means you can power-down your PC in just a few seconds – and restart it just as quickly.

Tablet: Most versions of Windows Vista will include a super-portable interface that relies on a digital stylus, rather than a mouse. This means you can use your PC anywhere without relying on a keyboard.
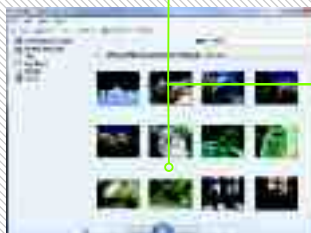
Media Center: This is an interface that's designed for use on entertainment PCs. It enables you to view and organise digital music, digital photos and TV, via a remote control. You can also easily share them with other devices like the Xbox 360.

PC gaming grows up

Vista takes the hassle out of playing on the PC

Vista is the very first version of Windows that's been built with gaming in mind. It puts games right up front, giving them their own section in the Start Menu. The new Games Explorer gives you quick access to all your installed games – each one gets a thumbnail of the box artwork, the PEGI rating, and links to the support website from directly within the interface. It also gives you quick links to game-friendly sections of the Control Panel, enabling more rapid troubleshooting.

Plug-in and play

So far, PC gaming has been all about the mouse and keyboard, with the controller serving as more of an afterthought. That all changes in Vista with a universal controller interface that all games can use – and it's based around the Xbox 360 controller. That means you can plug any 360 joypad (or any other controller that uses the same controls) into any Vista PC and it'll be instantly recognised without any need for configuration. You can even use the controller to navigate the desktop.

Parental controls

Mindful of the recent controversies over children and video games, Vista is brimming with parental-control features. As long as your kids have their own user account, you use a simple set of controls to block them from accessing games with a high enough PEGI rating, or specify the elements (such as swearing or extreme violence) that you don't want them to see. Vista will check every game installed and block access to everything you specify. You can even set time limits on how long they can play. Only want them to spend two hours a day on *World of Warcraft*? Then just rig their access to run from 6-8pm. There's a constant log running, too, so you can check any attempts to circumvent your protection.

Looking good

Most importantly, the graphics components have been completely overhauled. Microsoft's research showed that graphics problems are one of the major causes of crashes and instability in Windows XP, so it's been completely overhauled for Vista. There's also a new version of DirectX – snappily titled DirectX10 – to make all this new technology accessible for the next generation of games; we'll be looking at that in more detail next issue. ∎