

SONY COMPUTER ENTERTAINMENT ANNOUNCES "PROJECT MORPHEUS" – A VIRTUAL REALITY SYSTEM THAT EXPANDS THE WORLD OF PLAYSTATION®4 (PS4TM)

With Project Morpheus and PlayStation®Camera, Games will Immerse Players in Virtual Worlds, Delivering a Sense of Presence in Gaming Never Before Possible



Tokyo, March 19, 2014 – Sony Computer Entertainment Inc. (SCE) today announced the development of "Project Morpheus" (Morpheus) – a virtual reality (VR) system that takes the PlayStation®4 (PS4TM) system to the next level of immersion and demonstrates the future of gaming. SCE will continue development of Morpheus looking towards a future commercial launch.

"At SCE we view innovation as an opportunity to build on our mission to push the boundaries of play," said Shuhei Yoshida, President of SCE Worldwide Studios. "Project Morpheus is the latest example of innovation from SCE, and we're looking forward to its

continued development and the games that will be created as development kits get into the hands of content creators."

Morpheus enables developers to create experiences that deliver a sense of presence - where players feel as though they are physically inside the virtual world of a game. Presence is like a window into another world that heightens the emotions gamers experience as they play. Morpheus features a visor style head-mounted display and works seamlessly with PlayStation®Camera to deliver a unique VR experience right before the player's eyes. Inertial sensors built into the head mount unit and PlayStation Camera accurately track head orientation and movement so as the player's head rotates, the image of the virtual world rotates naturally and intuitively in real-time. Furthermore, in supporting games, the player can use a PlayStation®Move (PS Move) Motion Controller as an object, such as a sword. Morpheus will reproduce the player's hands and sword within the game so the player feels like they are physically fighting off enemies with their sword in the virtual world.

Morpheus adopts 3D audio technology uniquely developed by SCE. In addition to sounds coming from front, behind, left and right, Morpheus re-creates stereoscopic sounds heard from below and above the players, such as footsteps climbing up stairs below them, or engine noises of helicopters flying overhead. Sounds that players hear change in real-time depending on their head orientation, creating a highly realistic audio environment within an immersive 360-degree virtual world.

Along with PlayStation Camera, Wireless Controller for PS4, and PS Move, Morpheus will deliver immersive breakthrough entertainment experiences to gamers through the PS4 system, leveraging SCE's expertise across key areas for VR – including display/optics, audio, tracking, control, ease of use, and content.

Developers will be able to create Morpheus content for PS4, a platform which has sold over 6 million units only after 3 months and a half of its launch, and is continuing to show strong momentum. The Morpheus dedicated SDK is currently under development and will become available when ready.

During the Game Developers Conference 2014 held in San Francisco from March 19 through March 21, attendees can visit the Sony Computer Entertainment America booth to have a hands-on experience with Morpheus, which will be exhibited for reference. Attendees can enjoy exclusive technology demo such as *EVE Valkyrie* (CCP), a multiplayer dogfighting shooter that uses virtual reality to give the player the sense of being a real pilot in an EVE Online spaceship, *Thief* (SQUARE ENIX Co., LTD.), which allows players to explore the dark shadowy world of the stealth action title, "*The Castle*" (SCE) that shows various VR interactions utilizing PS Move, and "*The Deep*" (SCE), where players can observe the waters from inside a shark proof cage.

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<Specifications of "Project Morpheus" Prototype >

Component	Processor unit, head-mounted unit
Display Method	LCD
Panel Size	5 inches
Panel Resolution	$1920 \times RGB \times 1080 (960 \times RGB \times 1080 \text{ per eye})$
Field of View	90 degrees
Sensors	Accelerometer, Gyroscope
Connection interface	HDMI + USB
Function	3D audio, Social Screen

^{*}Specifications and designs are those of the prototype and are subject to change.

About Sony Computer Entertainment Inc.

Recognized as a global leader and company responsible for the progression of consumerbased computer entertainment, Sony Computer Entertainment Inc. (SCEI) manufactures, distributes, develops and markets the PSP® (PlayStation®Portable) handheld entertainment system, the PlayStation®3 (PS3TM) computer entertainment system, the PlayStation®Vita (PS Vita) portable entertainment system and the PlayStation®4 computer entertainment system. SCEI has revolutionized home entertainment since it launched PlayStation® in 1994. PlayStation®2 further enhanced the PlayStation® legacy as the core of home networked entertainment. PSP broadens the entertainment experiences into the portable arena. PS3 is a computer entertainment system that incorporates the powerful Cell Broadband Engine and RSX processors. PS Vita is an ultimate portable entertainment system that offers a revolutionary combination of rich gaming and social connectivity. PlayStation®4 redefines rich and immersive gameplay with powerful graphics and speed, intelligent personalization and deeply integrated social capabilities. PSNSM, that includes PlayStation®Store, delivers unparalleled online gaming experience to PlayStation users. SCEI also delivers the PlayStation experience to open operating systems through PlayStation®Mobile, a cross device platform. Headquartered in Tokyo, Japan, SCEI, along with its affiliated companies, Sony Computer Entertainment America

LLC and Sony Computer Entertainment Europe Ltd., and its division company, Sony Computer Entertainment Japan Asia, develops, publishes, markets and distributes hardware and software, and manages the third party licensing programs for these platforms in their respective markets worldwide.

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