

RICOH Announces “RICOH THETA x IoT Developers Contest”

Applicants Get Early Access to Ricoh’s New IoT Platform

TOKYO, March 31, 2016 – Ricoh today announced the second annual developers contest soliciting applications for apps and gadgets that utilize the RICOH THETA camera, which can take 360-degree, fully spherical images or videos in one capture. Registration will be open April 1 through August 10. Those registered have until August 31 to submit their final apps and gadgets. Applicants will get early access to the new platform, which is optimized for cloud-based applications leveraging the Internet of Things (IoT).

Held as part of Ricoh’s 80th anniversary celebration, this year’s contest challenges developers to create innovative apps and gadgets that work in conjunction with RICOH THETA, including those that allow the use of RICOH THETA in a cloud-based environment as enabled by the new IoT platform. Winners of the contest will receive a trip to Tokyo, Japan for awards ceremony and one million yen is given to the First Prize winner.

“In this age of the IoT where many objects are connected to cloud, the value of making data and API “open” has been increasing steadily. Open environment also helps drive innovation,” said Dr. Ken Sakamura, chair judge of this contest and Professor of Interfaculty of Initiative in Information Studies at University of Tokyo. “Globally, there is a trend to adopt open API to enable the control of products from outside, however, such trend is still small in Japanese market. In this contest, an early bird access to cloud API for RICOH THETA will be available to the contestants. So I look forward to seeing the contest receive submissions that mash up things and the camera with novel IoT ideas”.

RICOH THETA’s ability to capture imagery from all directions with a single capture means that it is an ideal device for providing content to applications that benefit from the emerging IoT age, in which virtually all devices are connected. The new IoT platform makes it possible for developers to efficiently and cost-effectively build cloud-based apps, which typically require significant expertise in cloud services and servers and a longer development time. Applicants get first access to the beta version of this platform and a cloud API, which will be released as a BaaS (Backend as a Service)*1 for RICOH THETA.

*1 BaaS (Backend as a Service) is a type of cloud computing that provides app developers with shared functions such as authentication and management of users and equipment, push notifications, and SNS linking through the

internet. App developers can incorporate these functions easily through the use of cloud API (Application Programming Interface) and SDK (Software Development Kit).

< Contest Overview >

Sponsor	Ricoh Company, Ltd.
Co-sponsor	YRP Ubiquitous Networking Laboratory
Special Cooperation	Institute of Infrastructure Application of Ubiquitous Computing, Interfaculty Initiative in Information Studies, Graduate School, the University of Tokyo
Cooperation	National Museum of Emerging Science and Innovation DWANGO Co., Ltd.
Qualifications for application	Only those who meet the requirements for this contest may apply. Individuals, teams, or companies are eligible. No limitations exist on nationality, age, place of residence, etc.
Ricoh product used	RICOH THETA / RICOH THETA (m15) / RICOH THETA S
How to apply	Fill in the application form on the special website during the entry period and submit the work by the deadline for product submission.
Concept of application	<ul style="list-style-type: none"> •New IoT concept apps that integrate the RICOH THETA with the Internet, including sensors, data on the Web, etc. •Gadgets and apps linked with RICOH THETA
Applicants' benefit	Cloud API beta version and 3D model data of RICOH THETA series *Cloud API will add its features sequentially. For details visit the contest website that is updated as needed.
Judging criteria	Innovative concept appropriate for IoT Entries will be judged comprehensively based on the points below: <ul style="list-style-type: none"> •Whether it is innovative (originality) •Whether it represents a vision (promise for the future, can be developed further) •Whether it would yield practical benefits
Judges	<ul style="list-style-type: none"> •Ken Sakamura, Professor of Interfaculty Initiative in Information Studies, the University of Tokyo •Atsushi Ozawa, Principal Investigator(Science Communication), National Museum of Emerging Science and Innovation (Miraikan), Japan •Ryotaro Muramatsu, CEO/Director, NAKED Inc. •Toshihiro Shimizu, Manager of Engineering and Communication Office, DWANGO Co., Ltd. •Shiro Kondo, Chairman of Ricoh

Awards	First Prize (one award): 1 million yen Second Prize (three awards): 500,000 yen 80th Anniversary Prize (five awards): 300,000 yen Honorable Mention (number of awards to be determined): 100,000 yen *Winners will be invited to the awards ceremony to be held in Tokyo and attend presentation of submitted works.
Schedule (Japan time)	Entry period: April 1, 2016 (Fri) – August 10, 2016 (Wed) Deadline for work submission: August 31, 2016 (Wed) Awards ceremony: November 7, 2016 (Mon)
Detailed information	Contest overview, main points for submissions, submitted works, etc. RICOH THETA x IoT Developers Contest website http://contest.theta360.com/index-en.html
Inquiries	RICOH THETA x IoT Developers Contest Office YRP Ubiquitous Networking Laboratory email: support@contest.theta360.com
Remarks	For details see application rules.

*The company names and product names described here are the trade names, trademarks or registered trademarks of each company.

| About Ricoh |

Ricoh is a global technology company that has been transforming the way people work for more than 80 years. Under its corporate tagline – *imagine. change.* – Ricoh continues to empower companies and individuals with services and technologies that inspire innovation, enhance sustainability and boost business growth. These include document management systems, IT services, production print solutions, digital cameras, and industrial systems.

Headquartered in Tokyo, Ricoh Group operates in over 190 countries. In the financial year ending March 2015, Ricoh Group had worldwide sales of 2,231 billion yen (approx. 18.5 billion USD).

For further information, please visit www.ricoh.com

| About YRP Ubiquitous Networking Laboratory (UNL) |

UNL promotes research and development in ubiquitous computing and IoT (Internet of Things) technology, in which many objects in our surroundings are embedded with small computer nodes with sensors and actuators that communicate with each other and operate in a cooperative manner to offer sophisticated services to human users.

www.ubin.jp/en

| About National Museum of Emerging Science and Innovation (Miraikan) |

Miraikan (The National Museum of Emerging Science and Innovation) highlights cutting-edge science and technology as "new knowledge and innovation" through various methods, such as permanent and special exhibitions, events, on the web. To arouse the interest of the general public, Miraikan is developing methods of expression and communication to present the information in an easy-to-understand manner.

<http://www.miraikan.jst.go.jp/en/>

*One of its official partners since October 2006, Ricoh is helping the next generation get acquainted with science and technology.

| About DWANGO Co., Ltd. |

DWANGO Co., Ltd., is an entertainment company striving to create the next generation of network communication throughout various genres such as gaming and music.

Our products include online and packaged games, music services for mobile, and “niconico douga” — a service that has over 50 million registered users and is one of Japan’s largest video sites.

<http://dwango.co.jp/english/>

*niconico douga is a registered trademark of the DWANGO Co., Ltd.