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This Week's Stories

EU-U.S. Commercial Data Transfer Pact Clears Final Hurdle

July 8, 2016

A commercial data transfer pact provisionally agreed by the EU executive and the United States in February received the green light from EU governments on Friday, the European Commission said, paving the way for it to come into effect next week.

Its introduction should end months of legal limbo for companies such as Google, Facebook and MasterCard after the EU's top court struck down the previous data transfer framework, Safe Harbour, on concerns about intrusive U.S. surveillance.

Representatives of European Union member states mostly voted in favor of the EU-U.S. Privacy Shield, but there were abstentions from Austria, Slovenia, Bulgaria and Croatia, sources said. Austria and Slovenia have voiced concerns that the pact does not go far enough to secure their citizens' privacy.

The new framework will underpin over \$250 billion dollars of transatlantic trade in digital services annually by facilitating cross-border data transfers that are crucial to international business.

"Today member states have given their strong support to the EU-U.S. Privacy Shield, the renewed safe framework for transatlantic data flows," Commission Vice-President Andrus Ansip and Justice Commissioner Vera Jourova said in a statement.

The Commission, the EU executive, will formally adopt the Privacy Shield on Tuesday.

The Privacy Shield seeks to strengthen the protection of Europeans whose data is moved to U.S. servers by giving EU citizens greater means to seek redress in case of disputes.

For 15 years Safe Harbour allowed both U.S. and European firms to get around tough EU data transfer rules by stating they complied with European privacy standards when storing information on U.S. servers.

Cross-border data transfers by businesses include payroll and human resources information as well as lucrative data used for targeted online advertising, which is of particular importance to technology companies.

Industry group DIGITALEUROPE which represents Apple, Google and IBM, among others, expressed relief at Friday's vote, saying it would restore trust in data transfers between the EU and United States.

"Our members are ready to implement the new framework and meet the compliance challenge that the strengthened provisions demand from companies," said John Higgins, director general of the group.

Brussels and Washington intensified negotiations to hammer out a replacement for Safe Harbour after the Court of Justice of the European Union in October declared it invalid because it did not sufficiently protect Europeans' data from U.S. snooping.



Revelations three years ago from former U.S. intelligence contractor Edward Snowden of mass U.S. surveillance practices caused political outrage in Europe and stoked mistrust of big U.S. tech companies.

"It (the PrivacyShield) is fundamentally different from the old Safe Harbour: It imposes clear and strong obligations on companies handling the data and makes sure that these rules are followed and enforced in practice," Ansip and Jourova said.

The United States will create an ombudsman within the State Department to field complaints from EU citizens about U.S. spying and has ruled out indiscriminate mass surveillance of Europeans' data.

EU data protection authorities in April demanded that the framework be improved, citing concerns with the leeway they said it left for the United States to collect data in bulk.

venturebeat.com

Apple Releases iOS 10 And macOS Sierra In Public Beta

July 7, 2016

"New features arriving with this update include expanded capabilities for Siri, Apple's intelligent digital assistant, as well as "differential privacy," a new technology aimed at improving machine learning based on anonymized analysis of customers' usage patterns."

iPhone and Mac fans who want to test out Apple's latest operating systems can now download the public beta versions of both iOS 10 and macOS Sierra. Both were released today, a few months before the final versions are launched in the fall.

Apple has described iOS 10 as the "biggest release ever" of its mobile operating system. New features arriving with this update include expanded capabilities for Siri, Apple's intelligent digital assistant, as well as "differential privacy," a new technology aimed at improving machine learning based on a anonymized analysis of customers' usage patterns.

Siri will also arrive for the first time on desktop devices with the launch of macOS Sierra. The updated operating system also introduces greater integration with the cloud Relevant Products/Services, making it easier for users to access files and documents saved on desktops via iPhones or iPads.

Redesigned Lock Screen, Siri SDK

The public beta version of iOS 10 updates some of the features that came out with the first preview build opened up to developers when it was launched at Apple's Worldwide Developer Conference last month. One of the first changes users will notice is the redesigned lock screen. Rather than sliding a finger across the screen to unlock a device, a user with an iPhone 6s, 6s Plus or SE will be able to wake the phone simply by raising it.

Sliding a finger to the right across the lock screen produces a view of widgets, while sliding to the left will turn on the iPhone's camera. A user will also be able to specify how much information appears on the lock screen through TouchID.

The new public beta version of iOS 10 also offers a number of other updates. Among the "hidden features" identified by CNET today are a built-in image and video search box in Messages, new filter options for Mail and one-tap unsubscribing to email newsletters.

With iOS 10, Apple is also opening up its intelligent assistant to developers with the Siri software development kit (SDK). The SDK will enable developers to create third-party apps that incorporate Siri for a variety of different tasks.

Mobile-to-Desktop Apple Pay

The public beta version of macOS Sierra is essentially the same as the second preview build made available to developers earlier this week. In addition to bringing Siri intelligence to the desktop, the

new version of macOS introduces new tools for turning photos into slideshows, copying text and other information from an iPhone to a Mac or vice versa, and automatically saving files and documents from a desktop device onto Apple's iCloud Drive.

Apple's latest desktop operating system update also brings new support for its Apple Pay mobile payments system. With macOS Sierra, a user can authorize desktop purchases with either an iPhone TouchID or an Apple Watch rather than having to input credit card or PayPal data into a computer.

Other new features include new support for optimizing storage Relevant Products/Services by automatically transferring rarely accessed files into the cloud, expanded emoji and message options, a redesigned Apple Music interface, picture-in-picture capabilities and tabs for improved management of multiple windows.

Like iOS 10, macOS Sierra will also introduce differential privacy that Apple said will help it "discover the usage patterns of a large number of users without compromising individual privacy." On desktops, that's expected to lead to improved autocorrect suggestions and lookup hints in Notes.

mobile-tech-today.com

Products & Services

Audible's New Channels Audio Content Subscription Service Is A Bet On A Voice-Powered Future

July 7, 2016

Amazon-owned Audible announced a new service called Channels today, one that differs from its typical audiobook business in offering more bite-size content from original content producers, as well as recordings of news stories from NYT, WSJ, The Washington Post and others. The original programming will be rolling out over time, covering comedy, investigatory journalism (think Serial) and talk shows – which is really Amazon applying the Netflix/Prime Originals model to audio content.

It's a very interesting move from Audible and Amazon, especially since the pricing model also mimics Prime; existing Audible subscribers also get access to Channels for free, and have been during the multi-month beta period it has already been undergoing. They'll also receive suggestions about Channels content that might be interesting, using previous listening choices from Audible's collection to guide recommendations (again, right out of the Netflix playbook).

Audible is careful not to call these audio shows "podcasts," though those of us who are fans of that type of media will recognize them as functionally identical. In an interview with the WSJ, Audible SVP of original content development Eric Nuzum explains why: The company doesn't want to limit their audience by alienating those who might not be familiar with podcasts, or who might know the term but don't consider themselves podcast listeners.

Make no mistake, though: The potential Amazon and Audible sees in Channels is the same potential that many others have been picking up on in podcasts. Podcasts present a way to provide multi-genre, opt-in entertainment to consumers with relatively low cost of entry, and unlike most other types of media, it can be consumed concurrent with other activities. But there's one other reason Amazon in particular might be interesting in securing a beach-head with this Amazon of Audio – Alexa.

Amazon's voice-powered computing interface, which currently resides most popularly in the Amazon Echo tubular speaker, presages a platform of the future in which our primary means of interacting

with our connected devices is through voice commands and conversation. If that bet ends up panning out, audio content suddenly has a lot more appeal.

Pick-up of Audible's Channels will be interesting to watch. In a way, it being tied to a service traditionally associated with audiobooks is a good thing, since it knows its users appreciate consuming content by listening. It'll have to work to distance itself from that to some extent, too, however, since "audiobook" as a concept might be just as limiting to audience growth as Nuzum fears "podcast" could be.

techcrunch.com

Snapchat May Be Outgrowing Its Disappearing Photos

July 7, 2016

Snapchat is taking its biggest step back yet from the disappearing messages that made it famous — and it may not be a bad thing.

Snapchat revealed a new feature Wednesday called Memories, which will allow users to more easily save their photos and videos and, for the first time, easily share photos and videos captured outside of the app.

On a practical level, Memories promises to bring users much more flexibility in how they share photos and videos within Snapchat. That's because you'll be able to not only have a more streamlined way to save your snaps, but you also will be able to share photos you've already taken.

More importantly, though, is the fact that you'll finally be able to use Snapchat to share any photo or video you want — not just those you took within the app. Sure, Snapchat will (subtly) distinguish between snaps taken and shared "in the moment" and those shared from Memories, but it's difficult to understate how transformative of a change this is for an app famous for its ephemerality.

Think about it: You'll soon be able to use the same amount of precision and planning (and the outside apps and equipment that goes with them) usually reserved for composing the perfect Instagram. It will open up Snapchat to a whole new kind of sharing. Instead of purely spontaneous animation-filled selfies and blurry videos, you can use Snapchat to share much more thoughtfully — the way you would on Facebook or other apps whose photos don't disappear. There's even a Timehop-like feature that will show you photos you took around the same time a year ago.

Initial reactions to the feature, which won't be rolling out for another couple weeks, so far seem to be positive. That's likely because even the app's most dedicated users have lamented not being able to recapture a particularly good snap they neglected to save.

At the same time, the timing of Memories is far from accidental. As we've previously noted, it's increasingly important for Snapchat to reach a broader (and, yes, older) audience if it hopes to keep growing and eventually go public. And Snapchat's disappearing messages — iconic though they may be — have been something of a blessing and a curse for the app. Ephemerality generated buzz in its early days, but the fleeting snaps have been a source of confusion for some.

I've introduced many friends and family members to Snapchat over the years and, invariably, one of the first questions they ask is, "But why don't my photos save?" (Or, as Mashable's deputy managing editor Kate Sommers-Dawes put it "Why would you want to send a adorable pic of your adorable dog and write hilarious messages on it if you're never going to see it again?")

And while you can explain away the nuances of sharing on Snapchat vs. sharing on Facebook or somewhere else ("Snapchat is for photos that you don't want to share on Facebook," I usually say) it's

difficult not to see this as a pivotal moment for the company. Memories is, essentially, a compromise. You can have ephemeral messages that disappear into the Snapchat ether and you can make Snapchat a home for your favorite moments.

Is it a risky move for a social media company whose entire business is premised on impermanence? Sure. But it might just be a necessary one.

[mashable.com](#)

Emerging Technology

Facebook Intros An Open Source Wireless Access Platform

July 7, 2016

As of the end of 2015, more than 4 billion people were not connected to the internet, according to Facebook numbers, and 10 percent of the world's population were living outside the range of cellular connectivity. To address this issue, the company announced the OpenCellular access platform, which it says over time will be open-sourcing the design.

"We will also work on other elements like the software management system, hardware design, baseband, amplifier, filter, mounting device and antennas," Facebook says in a statement. "Despite the widespread global adoption of mobile phones over the last 20 years, the cellular infrastructure required to support basic connectivity and more advanced capabilities like broadband is still unavailable or unaffordable in many parts of the world."

Facebook reports it is looking into multiple approaches aimed at improving connectivity infrastructure and lowering the cost of deploying and operating that infrastructure.

"We will also work on other elements like the software management system, hardware design, baseband, amplifier, filter, mounting device, and antennas," Facebook reports in a statement. "One of the reasons the expansion of cellular networks has stalled is that the ecosystem is constrained. Traditional cellular infrastructure can be very expensive, making it difficult for operators to deploy it everywhere and for smaller organizations or individuals to solve hyperlocal connectivity challenges. It's often unaffordable for them to attempt to extend network access in both rural and developed communities."

With OpenCellular, Facebook says it wants to develop affordable technology that can expand capacity and make it more cost-effective for operators to deploy networks in places where coverage is limited.

"We have implemented an access platform that can support a wide variety of wireless network standards, from 2G and LTE to Wi-Fi access points," Facebook says. "Anyone can customize the platform to meet their connectivity needs and set up the network of their choosing, in both rural and urban areas. For instance, the system, due to its on-board computing and storage capacity, can be configured as network-in-a-box or purely as a cellular access point."

[wirelessweek.com](#)

"With OpenCellular, Facebook says it wants to develop affordable technology that can expand capacity and make it more cost-effective for operators to deploy networks in places where coverage is limited."

'Welcome To Jupiter!' NASA's Juno Space Probe Arrives At Giant Planet

July 6, 2016

NASA says it has received a signal from 540 million miles across the solar system, confirming its Juno spacecraft has successfully started orbiting Jupiter, the largest planet in our solar system.

"Welcome to Jupiter!" flashed on screens at mission control at NASA's Jet Propulsion Lab in Pasadena, California.

The Juno team cheered and hugged.

"This is phenomenal," said Geoff Yoder, acting administrator for NASA's Science Mission Directorate.

The probe had to conduct a tricky maneuver to slow down enough to allow it to be pulled into orbit: It fired its main engine for 35 minutes, effectively hitting the brakes to slow the spacecraft by about 1,212 miles per hour (542 meters per second).

"NASA did it again," said Scott Bolton, Juno principal investigator.

"We're there, we're in orbit. We conquered Jupiter."

"Through tones Juno sang to us and it was a song of perfection," said Rick Nybakken, Juno Project Manager, referring to the audio signal the probe sent to indicate it was in orbit.

The Juno team celebrates at Mission Control at NASA's Jet Propulsion Laboratory in Pasadena, California.

Juno was launched nearly five years ago on a mission to study Jupiter's composition and evolution. It's the first spacecraft to orbit Jupiter since Galileo. Galileo was deliberately crashed into Jupiter on September 21, 2003, to protect one of its discoveries -- a possible ocean beneath Jupiter's moon Europa.

"Preliminary looks are that the spacecraft is performing well," said Guy Beutelschies, Director of Interplanetary Missions at Lockheed Martin Space Systems, the company that built the spacecraft.

Steve Levin, Juno Project Scientist, looked ahead to turning on the probe's instruments again, after they were turned off in preparation for the tricky orbit maneuver.

"What I'm really looking forward to is getting up close and personal with Jupiter," he said.

Gas giant

The largest planet in our solar system, Jupiter is a huge ball of gas 11 times wider than Earth and 300 times more massive than our planet.

Researchers think it was the first planet to form and that it holds clues to how the solar system evolved.

Spacecraft have been to Jupiter before. But scientists still are puzzled by the gas giant.

What's going on under Jupiter's dense clouds? Does it have a solid core? How much water is in its atmosphere? And how deep are those colorful bands and that mysterious giant red spot?

Juno will help answer those questions by looking at Jupiter's interior. The spacecraft will orbit the poles and try to dodge the planet's most hazardous radiation belts. To protect the spacecraft from the radiation, Juno has a shielded electronics vault.

At a press conference following the probe's successful arrival in orbit around Jupiter, NASA showed a video shot by Juno on its approach of Jupiter's moons traveling around the planet, capturing for the first time the movement of objects around a celestial body.

"In all of history, we've never really been able to see the motion of any heavenly body against another," Bolton told CNN, describing Jupiter and its moons as a "mini solar system."

"You have multiple moons going around Jupiter, and each one is going around at a different speed, based on its distance away from the planet. This is the king of our solar system and its disciples going around it.

It's very significant, we're finally able to see with real video, real pictures, and this motion that we've only been able to imagine it until today."

Spinning probe

Juno is a spinning, robotic probe as wide as a basketball court.

It will circle Jupiter 37 times for 20 months, diving down to about 2,600 miles (4,100 kilometers) above the planet's dense clouds.

The seven science instruments on board will study Jupiter's auroras and help scientists better understand the planet's origins, structure, atmosphere and magnetosphere.

Is shrinking superstorm evidence of climate change on Jupiter?

An onboard color camera called JunoCam will take "spectacular close-up, color images" of Jupiter, according to NASA. The space agency is asking the public to help decide where to point the camera.

Three 1.5-inch Lego figurines are also on board Juno. One is a likeness of Galileo Galilei -- the scientist who discovered Jupiter's four largest moons. The other two represent the Roman god Jupiter and his wife Juno. They were included to inspire children to study science and math.

Juno's main spacecraft body measures 11.5 feet (3.5 meters) tall and 11.5 feet in diameter. But with its three solar panels open, it spans about 66 feet (20 meters). For comparison, an NBA basketball court is 50 feet wide and 94 feet long.

Jupiter was 445 million miles (716 million kilometers) from Earth when Juno was launched from Cape Canaveral on August 5, 2011. But the probe has traveled a total distance of 1,740 million miles (2,800 million kilometers) to reach the gaseous planet, making a flyby of Earth to help pick up speed.

"After a 1.7 billion mile journey, we hit our burn targets within one second, on a target that was just tens of kilometers large," said Nybakken. "That's how well the Juno spacecraft performed tonight."

Mars: See NASA's 360 degree video of its surface

The Juno mission ends on February 20, 2018, when Juno is expected to crash into Jupiter.

cnn.com

Mergers and Acquisitions

Google Acquires Over-The-Top Video Company Anvato, Will Run The Service On Google's Cloud

July 7, 2016

Google today announced that it has acquired Anvato, a company with tools for streaming, editing, and delivering over-the-top (OTT) video.

Anvato enables live video streaming and on-demand viewing of online programming from cable set-up boxes. And it works with many channels to do that, taking care of ad insertion, encoding, and subscriptions.

"With OTT adoption rapidly accelerating, the Cloud Platform and Anvato teams will work together to deliver cloud solutions that help businesses in the media and entertainment industry scale their video infrastructure efforts and deliver high-quality, live video and on-demand content to consumers on any device — be it their smartphone, tablet or connected television," Google Cloud Platform senior product manager Belwadi Srikanth wrote in a blog post.

In the short term, this puts Google in line with its competitors' most recent activities. Two of Google's biggest competitors in the cloud infrastructure business, Amazon Web Services (AWS) and IBM, have bought video streaming companies: Elemental Technologies and Ustream, respectively. Meanwhile, Microsoft has been enhancing its portfolio of video services. One Anvato competitor is publicly traded Brightcove. There is also Ooyala, which was acquired in 2014 by Telstra.

Most broadly, this acquisition will lead to Google getting more cloud business, as Anvato will run its service on top of the Google cloud, Anvato chief executive Alper Turgut wrote in a blog post. For at least some workloads, Anvato relies on AWS and DigitalOcean.

Notably, the deal involves a company that has already done work in streaming video, with Android TV and Google Fiber TV. But today's announcements don't really talk about Google's potential there.

"This will allow us to supercharge our capabilities, accelerate the pace of innovation, and deliver tomorrow's video solutions faster, enabling media companies to better serve their customers," Turgut wrote.

Anvato started in 2007 and is based in Mountain View, California — the same city where Google has its headquarters. Investors include Oxantium Ventures. Customers include E!, E.W. Scripps, Food Network, Fox, Fusion, NBC Universal, Style, and Telemundo.

venturebeat.com

Netflix Signs Deal To Exclusively Stream CW Shows Eight Days After Season Finale

July 5, 2016

Netflix today reached an exclusive multi-year agreement with the CW to stream all past seasons of the network's shows online in the US. According to The Hollywood Reporter, the company has the streaming rights to hit series like The Flash and The Vampire Diaries, and starting with the 2016-2017 season, viewers will be able to watch the latest full season of new shows like Supergirl only eight days after the season finale airs.

"Anvato enables live video streaming and on-demand viewing of online programming from cable set-up boxes. And it works with many channels to do that, taking care of ad insertion, encoding, and subscriptions."

"Netflix members in the U.S. love the great lineup of series from The CW, and we are thrilled to extend the relationship and bring those shows to our members exclusively now, just eight days after their season finales," said Netflix content boss Ted Sarandos in a statement.

In addition, the most recent seasons of the critically acclaimed shows *Jane the Virgin* and *Crazy Ex-Girlfriend* just became available to watch.

This is a big deal for Netflix and its subscribers. While CW shows are already on the platform, viewers usually have to wait a year or so before the last season is made available for streaming. That changes with this deal. And with Netflix about to become the exclusive home for Disney films this fall, a Netflix subscription suddenly looks a great deal more appetizing. Of course, this exclusivity pact hurts Hulu, where viewers could up until now watch episodes the day after they air. With its own deal with the CW set to expire soon, that won't be possible, and Hulu will need to start hunting for its own exclusivity deals.

theverge.com

Industry Reports

Plan Renovation: Verizon Ups Prices But Adds More Data

July 6, 2016

Verizon used a press event on Wednesday to roll out the news it promised last week to address customer pain points like overages and billing anxieties. Customers can reportedly pay an additional \$5-10 a month to get more data as well as carryover data that now lets them maintain the previous month's data. Additionally, a safety mode lets consumers who go over their data allowance to remain connected. Beginning July 7, customers can pick the amount of data they want through the new "My Verizon" app. They also can change their plan and options as often as they want, according to Verizon.

"Manage your plan and its capabilities by connecting to your account whenever and wherever you want through the new My Verizon app," Verizon's CMO Diego Scotti, says. "We are delivering the most simple, straightforward mobile-first experience which we believe will give customers what they've told us they want: more simplicity and control right in the palms of their hands."

Verizon reports that in April 2013, an average Verizon smartphone customer used about 1 GB of data per month. By April 2016, the average increased to 2.7 GB per month. With the new Verizon plan, customers are said to get at least 30 percent more data. Here is a review of new pricing:

- Small: \$35/month for 2 GB (was \$30/month for 1 GB)
- Medium: \$50/month for 4 GB (was \$45/month for 3 GB)
- Large: \$70/month for 8 GB (was \$60/month for 6GB)
- XL: \$90/month for 16 GB (was \$80/month for 12GB)
- XXL: \$110/month for 24 GB (was \$100/month for 18GB)

In a call with reporters and analysts, Mike Haberman, VP, network for Verizon Wireless, talked about Sprint's advertising claims that its network is 1 percent less reliable than Verizon's network but costs about half. That difference is around 5 billion additional service failures a year, Haberman maintains.

With the new Verizon plan, carryover data automatically rolls to unused data for one month into the next, which includes any additional data purchased that month. Data expires at the end of the next monthly bill cycle.

With safety mode on the XL or XXL data size, customers can choose it for free, and S-, M-, and L-size customers pay \$5 per month if they add it. Once the data limit is hit, Verizon says it will move data from 4G LTE to 128 kbps, and customers won't pay for the data used over the plan size. Customers also can get back to 4G LTE speed or add more data via the app. The price is \$15 for each GB of additional data.

wirelessweek.com

Bendable, Curved, Foldable: New Report Looks at the Future of Wearable and Mobile Displays

July 5, 2016

Revenue from flexible displays is expected to increase more than 300 percent from \$3.7 billion in 2016 to \$15.5 billion in 2022, according to the new IHS "Flexible Display Market Tracker" report. The research firm also foresees that flexible displays will make up 13 percent of total display market revenue in 2020.

Samsung Electronics and LG Electronics launched the first smartphones with flexible active-matrix organic light-emitting diode (AMOLED) displays in 2013, and both companies continue to adapt flexible AMOLED displays for their smartphones, smartwatches and fitness trackers.

"The varieties of flexible displays include screens that are bendable, curved and edge-curved, but fully foldable form factors are expected within the next two years," Jerry Kang, principal analyst of display research at IHS, observes. "Only a few suppliers — including Samsung Display, LG Display, E-ink and Futaba — are now regularly supplying flexible displays to the market. However, many more panel makers are now attempting to build flexible display capacity, leveraging the latest AMOLED display technology."

Flexible displays are mostly used in smartphones and smartwatches right now, but IHS is forecasting other applications like tablet PCs, near-eye virtual reality devices, automotive monitors and OLED TVs by 2022.

"Consumer device manufacturers will eventually need to innovate their conventionally designed flat, rectangular form factors to make way for the latest curved, foldable and rollable screens," Kang says.

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