

# INAS and SunGard Higher Education Need Analysis FAQ

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## Schedule:

General availability of 2010-2011 Federal Methodology (FM) Need Analysis pilot code – September 2010

Estimated FM Need Analysis for 2011-2012 – October 2010

Official FM Need Analysis for 2011-2012 – January 2011

Institutional Methodology (IM) Need Analysis for 2011-2012 – October 2010

Only the IM Need Analysis in October will use code from The College Board.

## Overview:

As we have developed the new FM Need Analysis, there was both a beta and pilot testing phase for this functionality. From this testing, there were 4 outstanding issues that were identified and we are currently working on to resolve and deliver with the General Availability release in September, the 2011-2012 estimated FM Need Analysis in October, as well as the final FM Need Analysis with the winter release, January 2011.

Nothing else will change for the 2011-2012 year. There will be no impact to Profile or EDE dataload.

The outstanding issues include:

- A calculation error, where there is a mapping issue (in the following scenario). This issue will be resolved with the September 2010 release
  - When a student has provided Additional Financial Information on RNANA11 and the assumption override on RNIMS11 for assumption 5 or 6 is checked, RNPFM11 does not calculate the correct Student Contribution.
- A performance issue for online calculations. This issue has been resolved and will be part of the September 2010 release.
- A non-federal requirement to calculate and display parental contribution for independent students. This will be delivered as part of the estimated FM Need Analysis release in October.
- An issue with the AIX environment requiring a different version of java. To work around this temporarily, it is suggested to download the java jvm from Sun. This issue will be resolved with the September 2010 release.

## Performance (Stress) Testing:

There will be an opportunity for anyone who wishes to participate in expanded performance testing in the October and November 2010 frame. We invite anyone who is interested to contact our Development Manager, Jan Levsen, at [Jan.levsen@sungardhe.com](mailto:Jan.levsen@sungardhe.com).

This testing will include coordinating large batches of calculations to be sent at the same time from a number of different locations, while at the same time having some users on line measuring performance. We would like to stress the environment enough to ensure that during the peak times of the year, including early spring into summer, there is enough computing capacity to ensure the required performance.

## FAQ

### *General and Technical Questions:*

Q. What is the benefit of changing the delivery option now?

A. There are many benefits to the schools for this change. This new solution and deployment model will allow you to realize significant benefits, including:

- accelerate the availability of the annual FM Need Analysis by about 6 weeks compared to the College Board offering
- alleviate the burden put on your IT staff to make the complex upgrades for the FM Need Analysis because there is no onsite installation needed for the methodology
- allow your staff to take advantage of the updates as soon as they are released because we will simply install the update for you and you will have instant access to the changes
- allow SunGard Higher Education to serve you better by allowing us to track and resolve issues more effectively and deploy changes and updates more quickly
- enable us to work directly with the Department of Education to accelerate delivery of federal logic to you, our customers
- alleviate the need to go through a regulatory, onsite update every year, so you can take advantage of updates as they occur, allowing faster adoption of the new changes
- elimination of one more COBOL process

Q. Can you define 'cloud' as something sitting in the cloud?

A. There is a lot of terminology and it basically means the same thing, remote hosting, in the cloud, SaaS (software as a service). This means that the location where the FM calculation is located remotely on the SunGard Infinity infrastructure. Basically, the software is not physically present on your campus.

Q. What versions of Banner will this be supported on?

A. Both version 7x and 8x will be supported. The General Availability release for FM Need Analysis 2010-2011 will be delivered in September as 7.18.1 and 8.8.1. This is optional functionality. The 7.18.1 release will only be installed if you take action to do so. The 8.8.1 functionality will be rolled into the 8.9 release at the end of September. This functionality will still be optional and there is no requirement to start using it at that time. NOTE: This calculation will be for the 2010-2011 aid year.

The Early Decision release in October will include the estimated FM calculation for the 2011-2012 aid year, and as the Winter release will include the Final or Official FM Need Analysis for 2011-2012.

NOTE: There will be no 7x support in Banner Financial Aid after the January 2011 release.

Q. Will there be a guide put out for the onsite installation process?

A. Yes, our release guide will include steps on how to set up both the on site as well as the remote hosting.

Q. When will this documentation be available?

A. This documentation is scheduled to be delivered with the General Availability release in September, however we will try to post an early version prior to that time frame.

Q. For schools who host locally, won't we still need patches and upgrades?

A. Yes, these will be delivered in the same manner as they are today via the download site. It will be the school's responsibility to apply those to the locally hosted environment to receive the updates. It is possible that the code for download could be a few days behind what is posted remotely as there is additional packaging and port testing required before code can be made available for schools to download.

Q. Will we still have multiple upgrades to do when the INAS upgrades are no more if we go to SaaS? In other words, how will the percentage of upgrades decrease when we use SaaS?

A. There will be one less scheduled release per year, in February when we have to deliver the Official FM calculation. This functionality will now be rolled into the Winter release in early January. Any other defect corrections or patches throughout the year will be reduced or replaced depending on if the patch is specific to the FM calculation or includes other defect corrections as well. The complication of having a bananas links directory for INAS code will be eliminated, as any code we deliver for this solution will either be in forms, or in the java process.

Q. We currently test each patch and/or regulatory release prior to installing the update in PROD. What do you see as a best practice regarding institutional testing patches and updates using the new SaaS service?

A. Each school will need to determine whether to continue to test prior to installing in their production environment or not. Again, this choice and timing will be unique potentially to the code being updated as well as the school.

Q. What happens when the SaaS hosted solution is temporarily unavailable – due to network problems, problems with the SaaS itself, etc.? How will a call from forms or from a batch process handle that?

A. If the FM Calc Service is down, the Banner client program will receive a socket connection timeout exception. We will work to provide more guidance in this area.

Q. Does the Windows server have to be dedicated if we host?

A. No, the Windows server does not need to be dedicated if you host.

Q. Where does the local process calling the SaaS FM Need Analysis reside? INB, Job, Database?

A. The local process calling the SaaS FM Need Analysis resides in job sub.

Q. Are the 4 servers actual physical servers or are they virtual? If they are virtual, can you describe the physical hardware they are running on?

A. They are virtual servers residing on the Infinity Infrastructure. VM's can be moved from one environment to another, but are configured for the same level of resources, which is Windows Server 2008 VM with a 3Ghz CPU and 4GB of RAM.

Q. Windows Server 2008 – 32 bit or 64 bit? Is R2 supported?

A. 64 bit Windows Server 2008. We have not tested on R2 at this time.

Q. What will this cost us? Will there be additional charges if customers choose to use SaaS or stay with what they currently have?

A. There is no additional cost for utilizing SunGard Higher Education's FM Need Analysis, either on-premise or the SaaS version. There are some new hardware requirements for on-premise that were outlined in the FACT Sheet. NOTE: The hardware requirements on your site only apply if you are hosting the web service locally. If you are using the remote version, there is no additional hardware to configure.

Q. We have several schools that are hosted by a single data center. Could we share a local server if we choose to go that route?

A. Yes.

Q. It is my understanding that each school will have their own authentication code? If I want my test environment pointing to one version of the calculation and my production to another version, will you have multiple versions on your machine?

A. Each school will have its own authentication. Yes, we will support multiple versions and will provide instructions on how to set up to the point to the correct one.

Q. Do we require Banner Student 8.2?

A. Not at this time. This process is not independent of any other Financial Aid system dependencies. When the Financial Aid baseline product requires Banner Student 8.3., this solution will also.

Q. We run Oracle 11g RAC – will this work with the new solution?

A. Yes, this will work with Oracle 11g RAC.

Q. What is SunGard Higher Education's next offering on the Infinity Platform?

A. We are currently discussing this. More information will be coming soon.

Q. What are the maintenance windows and service level requirements?

A. Whenever there is any maintenance that will affect availability, notifications will be sent as early as possible. However, there are regularly scheduled maintenance windows on a weekly basis from Sunday 1:00 AM Eastern to 6:00 AM Eastern. Not all of these maintenance windows will be used nor will all maintenance affect system availability.

The Service Level Agreement is for 99.5% which does not include scheduled maintenance when the system will be down.

Q. What will it take to load this solution on our server? And what maintenance needs to be planned for that server?

A. If the server already meets the minimum requirements stated in the cover letter, then applying this release should take 30 minutes to an hour. The maintenance will be to apply upgrades and patches when they are delivered.

Q. How long will it take to do a need calculation, assuming they can be done real time?

A. The processing time should be the same as you experience today. However, please note that there is an outstanding issue we are working on to ensure a very fast response for online processing. Also, SunGard Higher Education will be load balancing the calculators so that as there is higher volume we will add additional capacity, and as volume goes down, we will ramp down capacity. The goal is to maintain a stable consistent and high performance level for all schools.

Q. What is SunGard Higher Education doing to secure the data that will be transmitted between schools and SunGard?

A. The FM formula was evaluated and only that data that is used in the FM formula is being transmitted. For the 2010-2011 aid year, the only PII data that must be sent is the birth date and state of residence of the student and parent. All data that is being sent is using SSL internet security which is encrypted data. Finally, each school will be provided a unique identifier that will provide access to the web service. Once the connection is open to send the data, the results will be sent back over the same connection.

Q. Please provide customers with a brief explanation of the technical functionality of the calculation. How is it happening? Is there a listener? Will customers be dropping files onto something?

A. Yes, as with all internet based transactions, there will be listeners involved to ensure that we can load balance the transactions. The school will kick off the process, either on line or in batch and it will execute immediately, returning results in the same communication channel.

Q. If we choose this technology what will be the turnaround time from SunGard to help us implement it, or do we need to wait until SunGard is available since potentially there can be a lot of schools switching to the hosted technology?

A. There should be little need for assistance to set up and get it running. We will be providing detailed documentation to assist. Also, we recommend that between the General Availability in September and before you need it for production in January that you set up and test (at least to ensure you are connected).

Q. If scheduled maintenance, you said that a broadcast message goes out but does the form display a message (and note that scheduled maintenance is early for east coast, but not for west coast)?

A. For scheduled maintenance, we will send messages to the Commons to notify clients of the anticipated down time. We will make sure to take into account time zone differences. If the system is down, a time out message will be pushed to the user.

Q. Is an SSL certificate needed on the job sub server for off premise?

A. No, there is an SSL certificate on the host machine.

Q. To clarify – no matter which option – we need an extra server to communicate?

A. No, that is incorrect. You need no extra hardware if you choose to use the SaaS method. If you choose to host locally, you will need a Windows server, which you may already have on campus.

Q. Are both options included in existing licensing agreements or is the hosted option something additional?

A. Both on-premise and off-premise are including in your existing licensing agreement. There is no additional charge for the hosting option. However, you will need to sign an addendum to your current agreement for either option.

Q. What changes have been made to the SaaS FM process since May that would suggest that customers should try again if they had a negative experience in the pilot program with response time?

A. There were a few issues that were identified during the pilot program that are being resolved. When the General Availability FM Need Analysis is released in September 2010, the changes will be part of that release.

Q. Can the calculation web services be accessible outside of Banner (called by custom applications)?

A. No, this is not a public web service. It will only respond to the requests that it is expecting.

Q. Why is SunGard opting to do the INAS FM calculations this way?

A. SunGard is looking to move more and more code to a SaaS model to reduce the total cost of ownership for our customers. This means fewer upgrades, fewer patches, faster access to code, and this is especially true in the Financial Aid area where things change so fast. Once a change gets through packaging and deployment, how long does it take to get the end users the ability to use that functionality? The goal is to shorten that window for you. The FM calculation makes sense as a starting point as it is at the beginning of the process, already is almost a standalone process, and we can eliminate a third party being involved in the process. This is the starting point, in the future SunGard wants to break some of these hard connections and make more and more of the system available to you in a standalone type format. This will allow schools who don't use certain parts of the system to never load them.

Q. Why is the process being implemented so quickly?

A. SunGard had a 2009-2010 beta test period for 3 months then moved to a pilot test phase for all of the 2010 calendar year using the 2010-2011 calculation. To be fiscally responsible with both your maintenance dollars and our resources, it does not make sense to support 2 methods of calculating the federal methodology for one more year. The pilot was well advertised and was open to anyone to participate, and there was a session to discuss this at Summit. The next phase is to then communicate with our customers, and be prepared for the January release, which is being done now.

Q. How long will you support the hosted solution and when is the anticipated date it will no longer be supported?

A. The support for each individual year calculation will line up with our support of the aid year. Every Winter release we desupport an old year including all forms and processes. This means that we support 5 or 6 aid years back. The same will be true here. As we desupport the 2011-2012 aid year forms, and other processes, we will also desupport the FM calculation.

Q. The SaaS web service runs on the Infinity platform. Must Infinity be installed or run on the local server if hosted locally?

A. No, there is a general confusion between Infinity Infrastructure and some of the Infinity software assets like IPP. We are leveraging the Infinity infrastructure for this service. The only thing that needs to be installed on premise is the Banner release. No software from Infinity is required.

Q. What are the upgrade dependencies? Can we just ignore all other products, such as Banner AR and Banner General?

A. The same dependencies that exist for the rest of the Banner Financial Aid product will exist for the Web Service. The reason is that while the calculation itself will be remote, at this time all data is being called from and being stored in the table structures on your campus. The same is true for the forms and the actual process that executes the web service. So there is an initial install of the forms and new process (RNPFMxx) with the appropriate release, and at that time all dependencies must be in sync.

Q. We have multiple test instances. Do we need one connection to SaaS or one per instance?

A. You will need to make a connection for each instance. This will allow you to point to different versions of the web service on a test environment and a different version on another environment.

Q. Will we be able to switch back and forth between a local web service and the SaaS model?

A. At this point in time you must choose one, but there is no penalty or cost to later changing your mind and moving to the other option.

Q. I read that the onsite option will eventually be eliminated. What is the time frame on that?

A. SunGard has no time frame on eliminating the onsite option for this solution. While we would like to move to more SaaS components, this is a new way to process data and it will take some getting used to. There is also the potential that some states may need to catch up to technology to allow their schools to transmit data to a web service. We will keep you posted if there are any changes in these plans.

Q. Our job sub server is clustered, what affect will this have on the SaaS model?

A. This should have no impact, however to ensure this, please test this configuration as early as possible, preferably through the test window in October and November.

Q. What are the java requirements on the client end using the hosted SaaS method?

A. On Banner 7x you may use 1.4.2 or higher. For Banner 8x you must be at 1.5 or higher. It is however recommended that given the java support has expired for 1.4.2 and 1.5, that schools start to migrate to Java 1.6.

Q. Any additional security roles needed to be added to end users?

A. No, there is no need for additional roles. There will be some additional forms that will require security to be set up when the release comes out.

Q. What are the technology implications of this change? Will this be delivered to campuses using similar COBOL based technology as in the past, java, or something new?

A. The Banner process that extracts and imports the data for the calculation is java based, with an xml schema to transport the data.

Q. You mention a Windows server, will Unix and other current platforms continue to be supported?

A. A Windows environment is only required if you choose to host the FM calculation on your site and it is written in .net. This is where the calculation must be hosted. Everything else on your system will operate as it always has. If you choose to access the calculation remotely, then there is no requirement for any additional hardware.

## ***Communication and Process***

Q. How was this information communicated?

A. An email was sent to the Information Technology office and Financial Aid office on every campus at the end of July 2010.

Q. I've seen schools must sign an agreement for which option to choose (SaaS or hosted locally). Do we get an opportunity to try the SaaS option in test before signing the agreement?

A. Please plan on installing and testing the General Availability release that will be available in September. This will provide you an opportunity to test the SaaS model.

Q. Why was this letter not sent to all Banner schools?

A. The communication letter about the INAS changes was sent to all Banner Financial Aid customers, to representatives in the Information Technology department as well as the Financial Aid Office.

Q. What are the choices/decisions we have to make?

A. The decision you have to make is whether to access the FM calculation remotely via the Infinity server or to locally host the FM calculation at your school on a Windows platform environment.

Q. We are a pilot school, do we need to fill out another 'contract' or are we all set?

A. There will be a letter that will be sent to all schools to ask a number of questions, including who would you like the authentication code sent to on your campus, whether you want to host the web service locally or have it be remote, and some other questions. Once you return that, a contract addendum will be sent that will also need to be completed. NOTE: These must be signed by whoever on campus is allowed to sign for contracts.

Q. How long after we return all of these documents before we can have access to the system?

A. It will take 5 – 7 business days to get everything set up on your account after you send in the signed contract addendum.

## ***FAQ for FM Need Analysis***

Q. Will SunGard Higher Education support both the FM calculation from INAS as well as their own calculation for the 2011-2012 aid year?

A. No, SunGard Higher Education will support only our own FM calculation for the 2011-2012 aid year. All clients who today use the FM calculation will continue to do so. The only difference is where the code comes from and what you need to do to set up your system to access the calculation. NOTE: There was a misstatement in the FACT Sheet that stated that schools could continue to get FM calculation from the College Board. This is incorrect.

Q. Are the calculations batched or immediate?

A. Both, the same as before.

Q. Just to clarify, schools will not be able to run RNEINxx if they are experiencing any kind of internet access problems?

A. That is correct. SunGard will not support the FM calculation via RNEINxx for the 2011-2012 year. If there are performance problems via the internet, it may be an option to run this solution as locally hosted on your campus.

Q. We currently have the output from RNEINxx emailed to the user. Will that still be possible?

A. This is a local modification and will have to be handled at each school.

Q. Will SunGard Higher Education retain the copy FM to IM function (RNAPRxx)?

A. Yes, SunGard Higher Education will retain the copy FM to IM function.

Q. Will there be screens that display both FM and IM data/results simultaneously as they currently are with RNAPRxx? RNINAIQ? RNRSLTxx?

A. This will work exactly the same.

Q. Will both IM and FM data still be stored in our on-site tables?

A. Yes, there will be no data stored off of your campus.

Q. If you are only changing the 9 month budget to a 5 month budget, will we need to use the new FM service?

A. Yes, anywhere that the FM INAS calculation was run in the past, for 2011-2012 the new FM calculation will need to be executed.

Q. When I make a verification data change on RNANAx, will I still be able to get an instantaneous EFC recalculation on RPAAWRD so that we can go ahead and award the student accurately?

A. Yes, you will be able to get an instantaneous EFC recalculation.

Q. If we only use FM, do we still need College Board INAS?

A. No, the SunGard FM calculation replaces FM INAS for 2011-2012.

Q. For initial data load, will it automatically calculate EFC or will we have to run a job to calculate EFC as part of this data load process?

A. This will work the same as it does today. The dataload process will load the initial results from CPS and then if you want to set a parameter in Part 3 of dataload (RCRTPxx). You will set up job streaming as you do now to have the need analysis run immediately.

Q. What about simulations? Will we still be able to get an EFC during this process?

A. Yes, you will still be able to get an EFC during this process.

Q. Can you clarify exactly what will change with FM, EFM, and IM? We have IM and EFM also, and unless we missed it, we didn't see any reference to those pieces.

A. FM Need Analysis will now be offered by SunGard Higher Education either on-premise or as a SaaS solution. EFM will be provided by SunGard Higher Education and will be available in October 2010. IM is not changing and will be available with the Early Decision release in October.

Q. What differences will customers see if the College Board is providing this information instead of SunGard Higher Education? Does the College Board currently provide SunGard Higher Education with the INAS piece of the install?

A. The differences will be minimal from what SunGard Higher Education is providing for FM Need Analysis compared to what was provided in the past. In the past, the College Board provided SunGard Higher Education the code for the FM calculations. Now SunGard Higher Education is generating the code, but the solution will functionally be the same. For the IM Need Analysis, the College Board will still provide the calculation to SunGard Higher Education.

Q. With the SaaS offering, can the new jobs be run through a job scheduler just like the old job?

A. Yes, this is just a new java process and it can be scheduled like any other java process.

Q. Will SunGard Higher Education go through certification for the FM calculation?

A. This process has not been supported by the Department of Education for several years. SunGard Higher Education will use the federal formula specifications published by the Department of Education, and will complete testing on all provided test cases to ensure accuracy.

Q. Aren't there concerns about sending student data?

A. Because of the limited information that is being sent, the encryption and security, as well as no information being stored at the hosting site, we do not feel that there are any issues with sending the student data. The Department of Education also does not see any reason for concern. However, if you have concerns about sending this data for your campus, you can still plan to use the locally hosted version of the calculation.

Q. Will customers be able to calculate an estimated FM (EFM) using profile data before FAFSA data is available as they are currently?

A. Yes, the estimated FM release is scheduled for October 2010.

Q. What is the impact to the end users? Will this be an invisible transition to the end-users within the Financial Aid office?

A. Yes, this will be invisible to end-users, with a few small exceptions. The changes to the end users are the following:

- New process – instead of calling RNEIN12, the solution will now use RNPFM12
- Forms will call the web service directly and output will be a bit different
- The same forms and results will be populated online for the end users; however, you can still execute online or batch as before.

RNPFM11.jar is a process that runs from Job submission. They will see the normal log and lis files. There is also a parameter to run the optional report. The report mirrors what you would see on forms RNINAIQ.

RNPFMXX.war is a servlet. For online processing, such as ROAIMMP, the call to the FM Calculation Web Service will be done through the servlet on the Oracle Application Server instead of the Job submission server. There are NO output, no lis, nor log files. If there are errors when the calculation executes these errors will appear as a popup similar to when you get an API error.

Institutions will have the option to run the RNPFM11.jar the process instead of the RNPFMXX.war the servlet for online calculation. If this is the option chosen, then the online calculation will have the standard lis and log files (ie: not take advantage of the performance improvement).

Q. Will end users have to do something with the xml files to move them so they get loaded?

A. No, the new process automatically extracts the required data, creates the xml, transmits the data to the web service, receives the data back and loads the data back into the tables.

Q. Is there somewhere that we can see or access the xml files?

A. This will not be in the baseline solution. We will document how to you do this, but a caution is that this will slow down your performance of the calculation. The delivered solution does not store the xml documents in this process, it is merely a means to transport the data back and forth. To allow users to access the xml files means they must be stored somewhere and that will take time, especially the more records there are.

Q. How many instances can a school 'plumb into' in the cloud if we use the remotely hosted?

A. You can run as many simultaneous calculations as you want. For example if you are running a batch, and then others are on line, there is no limit to the 'plumbing' available.

Q. Will customers still be able to copy data into FM tables from external sources, e.g. IDOC data through the RNATXxx form?

A. This is a local modification and not supported by the baseline product. However, there is nothing changing that should impact this.

Q. Will schools be given the option of staying with the College Board's FM INAS for 2011-2012?

A. No, not through SunGard Higher Education. If you wish to utilize the College Board FM INAS calculation you will need to contract with them separately and write the appropriate interface to support it.

Q. If a school opts to move to SunGard Higher Education's FM Need Analysis for 2011-2012 and it isn't working for them, can they switch mid-year to the College Board? If they can, what would be involved?

A. No, the College Board INAS FM calculation will not be supported in 2011-2012. Functionally, there should not be any reason for a school to have to switch to the on-premise option. SunGard Higher Education is committed to this solution and will resolve any reported defects timely. However, if an institution decides that they would like to switch to the on-premise option, they can be offered by SunGard Higher Education, they can.

Q. Can FM Need Analysis be on an INB server? Or does it have to be on another server apart from INB? If it's another server, is there any need for SSL certification?

A. If you choose the on-premise option, you will need to have a Windows server. It can be used for anything else you choose to use it for as well, but it will be the server for the web service that contains the FM calculation. If you use the on-premise solution you will not need an external port, only to and from this on site Windows box. If your INB server is a Windows box, then yes, both the INB and the FM Calc Web Service can be on the same computer.

If the FM Calc Web Service is running as an INTRA-net only, meaning not visible outside of the institution, then SSL is NOT required. In this instance, SSL is never required as it is part of an overall review of the security needs of the institution. That need dictates the requirement. For example, if the FM Calc Web Service is visible to ONLY the administrative staff and that group of computers is well protected within a firewall, then the SSL is not needed. On the other hand if FM Calc Web Service is visible to the students at the campus, then SSL is highly recommended. Therefore, it is needed.

There are 2 types SSL certificates:

1. A self-signing – which the institution can generate themselves and load onto the box that is hosting FM Calc Web Service. Then register the certificate with the Job submission server to say that the box can be trusted.
2. A trusted Certificate – register your domain with a trusted Certificate Authority (CA), like VeriSign. Load the CA onto the hosting computer that has the FM Calc Web Service. Then check to see if the CA is one of CA already loaded on the Job submission server. If it is already loaded, then no action is needed. Otherwise, you need to register the certificate.

Q. What plans are in place for business continuity? What are back up plans?

A. The service is designed to be highly available and run on an array of servers behind a load balancer. The load balancer allows for requests to be routed to the next available server using a round robin methodology. This architecture will allow us to add capacity if required, and to maintain the overall system by applying patches to a subset of the servers at a time, without making the entire system unavailable.

Additionally, all of the servers are virtualized, and in the case of an impending or actual hardware failure, will automatically be relocated to another host without requiring human intervention. This

allows the infrastructure to maintain availability beyond what normal 'bare metal' servers are capable of providing due to the built in redundancy of the virtualized infrastructure.

The FM service is being hosted on SunGard's Infinity Infrastructure which includes full Disaster Recovery capabilities. In the event of a catastrophic failure of the primary data center, the service would automatically be started in the secondary data center and all requests would be re-routed there. There is a recovery window of 4 hours to bring up the service in the secondary data center. In the event of a catastrophic failure, users would be notified of the outage, along with scheduled follow up messages that would update the information and estimated time to make the system available.

Q. Will this service be available on holidays?

A. Yes, this is a machine and it does not get holidays off. It is available 24x7, 365 days a year. The only down time will be scheduled maintenance windows which will be communicated to you in advance.

## ***FAQ for IM Need Analysis***

Q. What is the status of the IM calculation we currently receive from the College Board?

A. Schools will continue to receive the IM calculation as they have in the past for the 2011-2012 aid year.

Q. Will SunGard Higher Education replace the IM calculation as well in the future?

A. No, SunGard Higher Education is partnering with the College Board to host their proprietary IM calculation in future years. This will change the way you access the calculation, but it will still be the solution provided by the College Board.

Q. Is CSS profile loading being supported for 2011-2012?

A. Yes, this does not change.

Q. Will customers still be able to alter IM calculations globally as they currently are through RNRGLxx?

A. Yes, customers will be able to alter IM calculations globally.

Q. Will customers no longer have the IM/INAS calculator for the 2011-2012 year?

A. The IM Need Analysis solution will be the same for 2011-2012 aid year as it has been in the past.

Q. Are there any IM pilot schools willing to talk to customers about the results of their testing?

A. We did not perform an IM Pilot. Only the FM calculation was impacted.

Q. Please clarify the delivery method for the continued use of the IM calculations from the College Board, until the IM piece is also offered as a SaaS component? Will that be merged into the Banner Financial Aid product and be packaged in that manner, or will customers continue to look for and download the College Board-INAS Banner product along with the Banner Financial Aid product upgrades?



A. IM INAS will continue to be delivered as it has in the past for the 2011-2012 aid year.

