



YIELD & STREAM

Pricing INTELLIGENCE at Work

APRIL 2006

WHAT'S NEW AT IVORY

Release 8.90 of SuperTRUMP contains many handy new features, including Split TRAC, Fee and Asset Summary screens and many more accounting options – all to make pricing and managing a deal faster, easier and more accurate.

Database Functionality - While SuperTRUMP is integrated with database solutions around the world, a major new initiative will facilitate using SuperTRUMP to populate and analyze the data in your database.

The **SuperTRUMP Accounting Engine** is live at Key Bank in the UK, supplying the accounting streams booked into Oracle Lease Management.

Viva Mexico! Ivory gained its first direct customer in Latin America with the signing of Navistar International's Mexico City operations in January. Welcome! We now have direct customers in the US, Canada, Mexico, Australia and (soon) France, using SuperTRUMP to close deals around the globe.

WHY IN THE WORLD DID SUPERTRUMP 8.90 TAKE SO LONG?

A Light-Hearted Look at the Software Development Process

It seems like it's taken us years to bring out a new release of SuperTRUMP. Why so long? Here's an inside look at the process of developing complex software like ours.

The challenge of producing quality software is not just making single features work; it's getting all of the features to work together simultaneously. With our product, we face the additional task of making it forward- and backward-compatible, i.e., we design it to handle files produced on past versions, and, years from now, to handle files produced by future versions.

Our regular development takes place in source code called the "mainline." To begin building a new release, we copy the entire mainline code into a "pre-release," to have a separate, controlled environment. We decide which features will go into the pre-release, and branch the code when those features are finished. But we are careful not to put too much new or risky code into the mainline before branching, because any bugs we find after the branch, we'll have to fix in both places, instead of just once. Only fixes (not new features) are put into the pre-release.

At any rate, once we have the pre-release environment stable, we start testing in earnest. (In SuperTRUMP, the environment includes all 400 or so standard reports, as they are an integral part of the value to our users.) We review reports of bugs from new users, from veteran users and from testers. We run regression analysis against past versions of the program to make sure that the differences are acceptable. We build test cases for new features. We do exploratory testing, which is following our hunches along somewhat unstructured lines of logic to find new problems. When we document the new features, we exercise the new features to make sure that the interface, the language, and the calculations work as designed. We subject the program to stress tests. (Sometimes developers complain that it's not fair; no real user would ever do **that**; the tester replies, a bug is a bug!) All the while, we keep track of bugs we find and fix. When needed, we produce a new build, verify that the fixes work properly, and resume looking.

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SPECIAL

SuperTRUMP Certification and Training Seminar

Please refer to the article on page 8 for more details

SECURITY DEPOSITS IN SUPERTRUMP

Our customers occasionally ask us questions about how SuperTRUMP handles security deposits. This article is an attempt to clarify how SuperTRUMP handles security deposits and answer questions you may have about them.

A security deposit can work in a number of different ways. It may be placed into an interest earning account to be returned later with interest; it may be reinvested in another transaction and returned without interest, or it may be used to reduce the lessor's investment in the current lease.

Two points clear up much of the confusion about security deposits. One is that money, like everything else, cannot be in more than one place at a time. The security deposit can only perform one of these functions at a time. If the security deposit is placed in an interest earning account, or reinvested in another transaction, it cannot at the same time reduce the investment in the secured lease. And two, a security deposit in SuperTRUMP reduces the investment.

As a logical result of these two points, if a security deposit is deposited in an account or is otherwise invested, then it should

not be entered into SuperTRUMP as a part of the transaction.

If a security deposit is placed in an interest earning account it becomes its own separate financial transaction. It must remain in that account in order to earn interest and as such it is unavailable for any other purpose. Certainly, it still

on investment, are based on the reduced initial investment. A security deposit, depending on the size of course, can have a large impact on the yield results.

To sum up, in SuperTRUMP, a security deposit is an amount received on the lease start date (either the earliest delivery date or the commencement date) and returned on the lease end date, although it is possible to specify other dates. There are no tax consequences incurred by either the receipt or return of the security deposit.

The security deposit reduces the investment and does not earn interest. Typically, there is only one security deposit and it can be entered as a number of rents or as a specified amount, but it is also possible to enter multiple security deposits.

secures the lease in question, but it is not a part of the economics of the lease; it doesn't figure into the cash flows or any of the yields or other measures used to evaluate the lease. In this case any questions about the earnings on the security deposit can only be answered by looking at the interest earnings or returns on the particular investment where the deposit is placed.

A security deposit should only be entered into SuperTRUMP if that security deposit is used to reduce the lessor's initial investment. For example, if the asset cost is \$1,000,000 and the security deposit is \$100,000, then the lessor's initial net investment is reduced to \$900,000. And the yields, which measure the return

Test Your Knowledge

Which of the following are NOT true:

- 1) Equipment finance professionals enjoy hurricanes much more than your typical white collar worker.
- 2) Despite rumors to the contrary, Rwanda is not a popular spot for conventions.
- 3) Extreme sports, such as impromptu urban high-speed hang-gliding, are much more popular than golf and tennis among lease pricing professionals.
- 4) You need a sense of humor and good insurance coverage to thrive in the lease finance industry.

TIP OF THE DAY

We understand that our customers are busy and don't like the interruption of having to periodically call us for an activation code, and while we do like talking to each of you, we have finally implemented an automatic Internet based activation procedure. If you are doing a new installation you still have to call, but after that it should all be done automatically.

All you have to do to make SuperTRUMP activate over the Internet is check the checkbox in the license activation screen "Reactivate Automatically Using the Internet." Once the box is checked reactivation will be done behind the scenes. If you do see the activation screen appear, you can try checking the box and then click the "Internet Activate"

button. If that works you will be all set. If it doesn't, then you can still activate by phone.

Internet activation depends on the name and email address you have typed into the activation screen matching what we have typed into our database. If the Internet activation fails, it is possible that you, or more likely one of us, have entered your information incorrectly. A quick phone call to let us know that the Internet activation failed should help clear up the discrepancy.

We are working so that SuperTRUMP is more convenient even if it means less phone contact with our customers.

License Activation *

Please enter the following fields, then call Ivory Consulting at (925) 926-1100 to obtain an activation code. Close

Licensee Information

Company name **Leasem and Fleecem**

First & last name **Rich Banks**

e-mail address **rich.banks@leasemfleecem.com**

Phone number **555-555-1234**

Internet Activation

Reactivate Automatically using the Internet Internet Activate

Phone Activation

Serial number 377-4010

Activation code Phone Activate

Registration Status

Current edition Standard

Version Standard (Release) Version 8.90

Installation Stand-alone

Expiration date Mar-27-2007

Special Access

RESIDUAL VALUE INSURANCE

Lessors manage their mix of leases with several things in mind: financial reporting, credit risk, residual risk, cash flow, and taxes, to name a few. One technique has proved to be a helpful aid toward this end; it is called *Residual Value Insurance* (RVI). RVI is helpful in managing a mix of leases because it converts operating leases into capital (direct finance) leases. This article will describe the functioning of RVI and how to use it in SuperTRUMP.

The spirit of the distinction between capital leases and operating leases is important. A capital lease is considered to be analogous to a sale of the asset and uses up most of the value of the asset. An operating lease, in contrast, is more like a contract

covering the use of the asset for a relatively short portion of its useful life. Lessors usually prefer capital lease treatment because it enables an accelerated pattern of earnings recognition, rather than the straight-line method specified for operating leases. The specific rules for making this determination are published by the Financial Accounting Standards Board (FASB) as SFAS 13.

SFAS 13 specifies that a lease is to be capitalized if the present value of the rents and other payments made by the lessee to the lessor (the *Minimum Lease Payments*, or *MLP*) exceeds 90% of the cost of the asset. The MLP includes guarantees of the residual value, such as those provided by the lessee, a third

party, or through insurance. SFAS 13 also sets forth the calculation of the discount rate. That rate, called the *Implicit Interest Rate (IIR)*, is the rate which discounts the rents and economic residual to the cost of the equipment.

SuperTRUMP lets you model RVI quickly and with a minimum of steps. In Parameters | IRS/FAS Treatment, turn on "Automatically calculate RVI fee" The program will prompt you for a rate. This is the premium that the insurance provider charges you for the residual value protection. You also can select the amortization method that the program should use to deduct this fee. The default is *straight-line to end*.

Please continue on page 7

RISK-BASED PRICING

As lessors move from the comfortable old waters of MISF and spread-based pricing into the murky seas of risk-based ROE pricing, they need to give up their old navigation by the stars of simplifying assumptions and crude estimations and move to an accurate GPS system that prices a lease to within a few feet of its actual profitability once it hits the books.

We have to always keep in mind the twofold goal of competitive pricing. To win the deals that will make money and, just as importantly, lose the deals that your competitors have under-priced. A decade ago, when everyone was using shotgun pricing, you could count on getting lucky about half the time and being unlucky the other half. It tended to even out and everyone was profitable.

But what happens when your competitors refine their pricing and you don't? Let's take a simple real-world example. A number of your competitors are moving to credit-adjusted pricing where they offer lower rates to customers with good credit and higher rates to customers with poor credit. You give the same rate to everyone. Do I even need to ask what's going to happen? They're going to start winning more of the high credit deals and you're going to start winning more of the low credit deals. Although you haven't changed your pricing at all, your actual profit on booked deals is going to go down as your rate of default goes up. To make up for this shortfall, your response will be to raise your rates to everyone and before long you won't ever be competitive in the mid-credit market.

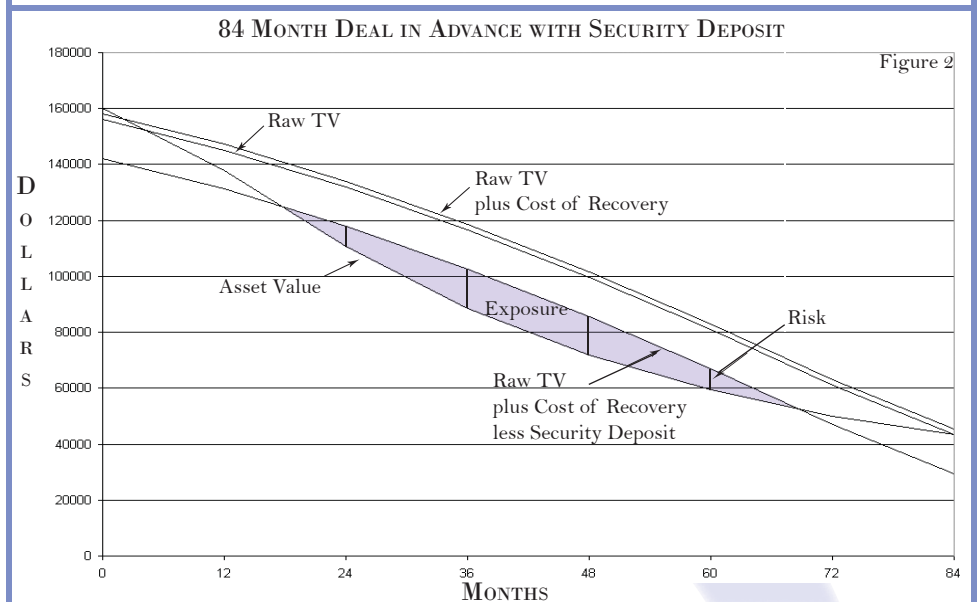
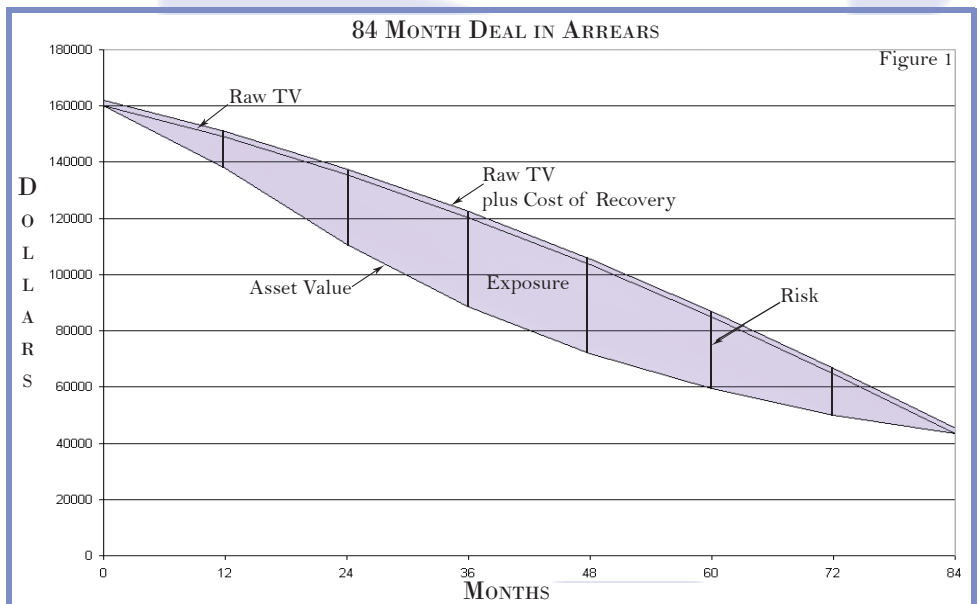
This is not going to happen overnight. Let's say that currently one in five lessors use credit-

adjusted pricing. The other four out of five lessors will see a minimal impact on their portfolios. But what happens over the next five years as three of the five move to credit-adjusted pricing? Suddenly the two-out-of-five holdouts start seeing a noticeable drop in profits. Again, this isn't going to happen tomorrow, but if you're still asking "if" you're going to update your pricing methodology rather than "when", you could be one of the two.

So, what does it mean to move to risk-adjusted pricing? There are several components of risk-based pricing, so far I've only focused on

customer credit. What are some of the others? Debt to equity ratios, money costs, probability of default, loss given default, exposure, SG&A expenses, loss reserves ... to name just a few.

If you're going to move to risk-based pricing, you can't do it half-heartedly. The ROE is a highly sensitive instrument, and if you're going to price to it, you have to refine all your assumptions. If you forgot to price in a \$75/month service contract into a deal you priced off an old MISF yield and decide to add it in later, you might see your yield drop a few basis points but when you throw that



same \$75/month into a deal priced with an ROE, you might see your lovely 15% ROE drop to a lean 12%.

Furthermore, it's not going to make sense to highly refine some of your assumptions while ignoring others. You can nail your expected loss calculations but if you're still using a "one size fits all" like-term cost of funds instead of an average-life-of-investment-based cost of funds or, better yet, a layered cost of funds your ROE could still be way off. It doesn't make sense to use a micrometer to measure your profitability if your tools are a chainsaw, a sledge hammer and a chisel.

Let's look at some of the pricing components and discuss how to handle them. In general, three things will have the greatest impact on your pricing: the customer, the asset and the structure of the deal. Let's look at how each of these affects your pricing.

Let's start with customer credit or risk rating. Certainly this will have an impact on your estimate of the probability of default in the deal and, if you're considering Basel II, your equity requirement for the deal. The equity requirement is a primary component of your ROE calculation and the probability of default will impact your expected loss calculation.

From the asset we'll pick up the FMV curve and the cost of recovery in the event of default. We will use the FMV curve for this discussion, but some companies may use an OLV ("orderly liquidation value") or some hybrid of the two.

From the deal structure itself we'll pick up the investment balance, the average life of that investment, and the raw termination values (investment balance plus tax adjustments, but excluding any TV penalties).

The average life of investment should determine the cost of funds (or "money cost") for the deal, which is another primary component of the ROE calculation. For more complicated structures a layered money cost calculation might be more appropriate.

Exposure is the difference between the raw TV from the deal minus the FMV curve from the asset. We have exposure when the TV exceeds the FMV curve. Our loss-given-default (LGD) at any point in the lease is going to be our TV plus the cost of recovery less the FMV. If we have a security deposit, we can deduct it from the TV. By structuring the lease to minimize exposure (e.g., switching the rents to advance or requiring a security deposit) we can minimize our LGD (this has the added benefit of lowering the money cost in the deal by lowering the average life of investment). The "expected loss" at any point in time will be the probability of default (from the customer risk rating) times the loss-given-default (calculated from the asset and deal structure). With the equity requirement, the money cost and the expected loss

calculations accounted for, you're well on your way to a solid ROE calculation.

At this point you may be wondering how much of this is in generic SuperTRUMP. The answer is: very little. While we've worked with a number of companies to refine their custom ROE calculations, and most of them incorporate several of the components described above, we have yet to see even two of them with identical algorithms. Furthermore, other than the describing the components in general and their interactions, we can never tell one leasing company how another leasing company does its calculations. So then, how does this help you? Because we've become very good at helping companies refine the calculations for themselves and using SuperTRUMP to validate their assumptions. We also know the questions to ask to make sure you're not overlooking important assumptions. Once a company has chosen a methodology, it's a fairly simple task to create a custom ROE that meets their needs. So, give us a call.

SCENARIOS

Is there any way I can keep various versions of the same transaction in one central place? Yes.

There is a feature in SuperTrump called Scenarios. Let's assume a deal is structured with a 17 percent residual. After the structuring is complete, hit FILE from the toolbar and SCENARIOS from the drop down menu and then hit OPEN. In the dialogue box click on ADD SCENARIO and it will be saved as Scenario 1. Enter a name in the box such as 17 RESIDUAL.

Now change the residual to 20 percent. Recalculate the rents and hit FILE/SCENARIOS/OPEN again. Click on ADD SCENARIOS again and you will now see Scenario 2 added. Give that a name like 20 RESIDUAL.

Save the parameter file in the usual manner. Next time you open this file you will have access to both versions of the transaction by clicking between the scenarios in the SCENARIOS dialog box.

This feature may also be used to track adjustments to a transaction as it goes through the approval process.



SUBSIDIES

SuperTRUMP treats subsidies as a special type of fee used to 'buy down' either the cost of the equipment or the customer's rate. To use subsidies, first turn on the 'Subsidies' feature under Controls - Features, then open the Subsidies screen under the Parameters menu.

The 'Dollar' and 'Percentage' fields work just like they do on other fees. With the Rate Adjustment, SuperTRUMP will calculate the subsidy which when (hypothetically) included in the selected rate calculation increases it by the entered adjustment rate. The choices are: base term without

residual, base term with residual, full term without residual or full term rate with residual. The rate adjustment subsidy allows you to quote a low rate to the customer while the up-front cash subsidy makes sure you are still getting the yield you require.

Subsidies [1 of 1] *

Description

Paid by **Manufacturer**

Dollar 0.00
 Percent 0.0000
 Rate adjustment 0.0000
 Which rate **Base term**

Active
 Blind subsidy

Associated with **All**

Buttons: OK, Cancel, Recover, Help

Did you know?

- Camels can be trained to do double-entry accounting, but cannot be forced to walk backwards in unison without the aid of mind-altering chemicals.
- The original Synthetic Leases were for equipment used to manufacture polyester double-knit golf pants.
- It is unwise to lease perishable items beyond their federally-mandated expiration date.

WHY SO LONG? (CONTINUED FROM PAGE 1)

We have a colorful crew with different motivations involved in producing SuperTRUMP. Testers are perfectionists, to a fault. They would rather keep testing to find the proverbial last bug, if they had just one more day. (That's because they are keenly aware of the industry maxim that fixing a bug after it's in production costs ten times what it costs to fix it during testing.) Developers have the most fun when they're working on the latest exciting features, not fixing bugs. Tech support people are interested in having a uniform and stable version of the software in the field. And marketing people, eager to get the latest software out to the users, have trouble understanding why all this takes so long!

How a new feature should be designed is rarely clear-cut. People

have different visions; reaching a consensus takes time. The discussions extend down to the smallest details, like the wording of a prompt. Sometimes users' opinions get into the mix and swing things in unpredictable ways. Many times decisions produce give-and-take compromises.

When one thing is changed, whether for a new feature or a fix, someone will have the bright idea that similar items elsewhere in the program should be consistent. Consistency includes terminology, calculations and interface behavior. Maybe a quick consistency check turns out to require changes in several other areas, which requires more testing, which might reveal new bugs, which require fixing, and, well, you get the idea.

Complex software is surprisingly fragile and interdependent. Interactions between features are the worst kind of bugs, because they are hard to anticipate and to fix. When we fix a bug, except in localized cases, all of the tests need to be rechecked, at least on a representative basis. This is because testing is the only way to determine the full effects of a change. It may sound silly, but even debugging can create new bugs.

SuperTRUMP v8.9 has many new features and enhancements of existing ones. Some areas of major changes are fees, asset association, FAS tests, summary screens, subsidies, and statistics, among many others. You will find a complete explanation in the release notes. We put a lot of work into this new version; we hope you find it friendly and useful.

RESIDUAL VALUE INSURANCE (CONTINUED FROM PAGE 3)

ST will first determine whether RVI is needed. If the lease is an operating lease, then the program will calculate whatever additional residual guarantee is required to meet the capital lease threshold. This amount will be modeled as RVI (it applies to all assets collectively and is not broken out into specific amounts on certain assets). ST will add a fee to the parameters to pay for that coverage. That fee will be labeled “Residual Insurance Premium.” (The switch has no effect if RVI is not needed, and a previously-existing RVI fee will be automatically removed if it is not needed.)

And so we come to the crux of the article! The lessor can choose to purchase RVI on a lease if capital lease treatment is desired. A number of insurance providers have specialized in such coverage. It is relatively inexpensive, as the protection is on the last piece of the residual value. That is, RVI for 10% of the equipment value pays out only if the lessor realizes less than 10% in sales proceeds, even when the economic residual was much higher, say 20%. If the lessor sold the equipment for 8%, the RVI provider would pay 2%, restoring the lessor’s proceeds to the protected 10%.

The RVI fee hurts the lessor’s yield, of course, but if you are targeting a yield, SuperTRUMP will automatically figure the cost of the RVI into the yield. Once structured, the lease will allow printing of all reports typically available for a capital lease, in particular, the pro-forma accounting reports. The classification and RVI values will be documented by the summary report. Details on the classification are shown by the “Classification, FAS” and the “Present Value Test, Lessor” reports in the FAS group. Finally, a proof of the IIR is shown in the Statistics group.

THIS MONTH IN LEASING HISTORY

30,000 B.C.: Neanderthal Man, whose survival was based on a primitive hunter-gatherer/cash purchase life-style, is driven to extinction by Cro-Magnon Man’s ability to farm and use more creative equipment financing options.

975 B.C.: Solomon proves his wisdom by leasing much of the equipment needed during his 40 year reign.

49 B.C.: Julius Caesar wades across the Rubicon, as the financing package for the proposed bridge had fallen apart due to the Republic’s refusal to accept a seasonal ‘skip’ payment structure.

1847: Using creative finance options proposed by his equipment supplier, Sutter builds a mill in California.

1998: President Bill Clinton denies he ever structured a synthetic lease with “that woman, Miss Lewinski.”



QUICK PRINT

SuperTRUMP has a number of ways to print reports. We have such a variety of ways, in fact, that there's sure to be one right for every user! We can print from the command line, from an icon, from within a report that's already on your screen, among others.

Perhaps the easiest way, however, is one often overlooked. It is called QuickPrint, and it is the toolbar printer icon with a lightning bolt. It allows you to print a report by just pointing at your desired report and double-clicking it. How can that be, you ask, that's too easy?! Well, it's true; the only catch is

that you have to invest a couple of minutes to set up the list of your favorite reports.

The first time you click this icon, the program will tell you that it is missing the QuickPrint file. Not to worry, just enter the edit dialog. That will let you set up a group of your favorite reports. First hit "New" within the "Group" box and give it a name. Then hit "Add report" and specify the first report, which can be from any report group. Hit it again to add another, from any group. Continue until you've included all the reports that you'd like in this list. When you're

finished, hit OK. The box now shows you all of your reports in a neat list. You can tuck that box away in a corner of your screen so that it's easily accessible, but out of your way.

Now, all you need to print is to double-click the report you want! What could be easier? To re-arrange the order or add or delete reports, just hit "Edit" in QuickPrint, make your changes, and hit OK again.

Try QuickPrint, and you might say that it is the easiest way of all to print reports!

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The Fine Print

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Thank you!

SUPERTRUMP CERTIFICATION SEMINAR AND TRAINING

Our Annual East Coast Training is Coming Soon!
May 22nd to 26th, in Baltimore, Maryland.

Finance Boot Camp

This is aimed at new SuperTRUMP users with little or no finance background. Successful completion will give the student the finance background needed to learn ST and an understanding of basic lease finance terms including yields, risks, residual, and related concepts, as well as cash, tax and accounting considerations.

SuperTRUMP Boot Camp

This is geared towards finance professionals new to ST. This class demonstrates how to use ST to price

Structuring, Expense Modeling, Advanced Cash Flow Screen, Modeling for Business Forecasting and SuperTRUMP Integration. For more information on these classes, please visit our website and look under Training.

Schedule:

Mon., May 22: Finance Boot Camp
Tues., May 23: SuperTRUMP Boot Camp

Wed., May 24: Intermediate SuperTRUMP

Thurs. & Fri. May 25 & 26: Advanced SuperTRUMP

TO REGISTER

Please download the registration form from our website at: www.ivorycc.com and fax the form to us at 925-926-1335. Or call Joseph at 925-926-1100 ext. 108.

basic leases and loans and to print out and use various reports.

Intermediate SuperTRUMP

For ST users already doing basic leases and loans, students will gain a broad, working knowledge of the program and its uses.

Advanced SuperTRUMP

Students can choose three to five classes from a variety of topics, including: Optimization, EBOs and Termination Values, Lease Purchases, Custom Reports, Portfolio, Advanced

Fifth Class is free!

A 10% Discount will be given for two or more attendees from the same company.



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