#### THE EXPERT'S VOICE" IN SPRING

# Pro Spring Boot

A no-nonsense guide containing case studies and best practices for Spring Boot

Felipe Gutierrez

# **Pro Spring Boot**



Felipe Gutierrez

#### Pro Spring Jimir

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### About the Author



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## About the Technical Reviewer



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I see that the express of the gratitude to the Approximant to Serve Angles for a verying not proposed, to black Process for keeping me on that and for his political with use, to Marthew Mindle and the rest of the Approximation for the project. Thinks to exemple of the marking this provide.

Thereis is no multi-currenteen, attained pointin, for all the divisib, and effort in his reviews, and the entire Spring from bours for according this amount of hormage.

Thanks to my parents, thouse Coursed Petipe Gotteres, for all then be a und support. Thanks is my breather Edgar General Gotteries. Special Banks in my gide wite long one on mark. Sector, Negrity me "Place," and America on "Coding" Description.

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#### CHAPTER



## Introduction to Spring Boot

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#### Spring Boot

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Figure 1-1. Ageing 2001 | margage /http://prejects\_upring\_is/upring-boots)

#### Spring Applications

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#### Spring Boot to the Rescue

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• Note: If you want to use Spring Boot right away, held from to use the hone's comparison section soon. The days used to be structure and every trop you need to but the Mount wroten it was one by level and.

#### Why Spring Boot?

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- Client Notice Applications that have durithfunction parameter (developed by the Newforthernorms)
- Productivity increases by resharing time of development and depleyment.
- Einterprise paradiar nois analy type our applications.
- Mass functional improvements, such as depring (less) Actions (a module that brings memory, health-checks, and management english and emborided containers are enuming seek approvations (see h.es. Transacy Buderness, lette, etc.)

The uses "approximate see" is groung armadical by consting scalable, highly socilable, and public applications, and forming from the perfectly by allowing developers to forms only on the basiness large, and to have a large to the large to the large to the large to the large.

#### Spring Boot Features

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   the main restrict common this singleton date. This perturbanches have provides a community was to (minute a Spring synthetim).
- Spring Facility you to come applications without requiring any XML; configuration Stirring Book down Communication.
- Spiring Book principes a flower builder Add sharings the SpiringSpirited and other suggestion above that allows you be competitively being both and open application constants. This putting is being a related to the Spiring Princewook and from it would intermable (Pyron are a Spiring drombipper about a you'd beauti pour about this bost in the finite full or the bost and the prince of the bost in the finite for the prince of the pour and the bost in the first prince of the prince of the bost in the bost in the prince of the bost in the bost
- Spiring Noot offers just in one season to configure the Spiring applications over to make burners. This will be explained in more detail to the believe or to make.
- I accurate that the my may be only an "experimental" be declared, which treates
  that Spring Bone will attempt to constant the right type of application, either a work
  application (by mollections a Tomica on Setty container) for a cough application.
- The ApplycationErgoverts number Spring from allowing your access and application arguments. The schools wishing a mant in rules acceptable on with number parameters, for marriple, and the nin—deling extent to a multi-trace and last access to these values.
- Opting Soot allows you is execute rade after the application has about if. The early
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- Spring Bendalities your to have problem that will help your application on in following programmers.
- Spring floor ellows you to multiples and the longergous sumpli-
- Spring Bend provides a graphy very to configure and discourse your dependencies by using started points. In other woods, if sometic griting to create a web application, you outly result to include the significance started web dependency. It your March point of Guide build the
- Replace their projective with of the free time functional requirements by using the hydrog floor foldowing so job was seen the health, necessary, and solven, of years repulsations.
- Spring Bent provides #Snahle (feature) annotations that help you to puritie, configure, and use technologies like databases (SQL and SneQL), exchang, eclimbring, dominated, lighting tenegration, benching, and major

As you and see, Spiring Book has all these hornors and more, and you'd' form more about these incomes in the following phaging. Now the more to said becoming more about forming book to seeing lines it works manually.

#### Summary

This chapter provided a quick necessary of the Spring Financians, and concred the of its new technologies. Spring there

The following chapters were showing you all the cool form to of Spring Bord, had by examing emple applies followed and sunferdanting the internals of Spring Bord and trouby reserving more complicated applications.

#### CHAPTER 2



## Your First Spring Boot Application

In the chapter you are going to mention Spring blost CLL, bear maner a toole about 3, and consist your fine. Applied Book application. Von will leave how Spring Blost and be intermelly as you have a bear of partner of the amount grant and only a continuous.

You can remote learning from applications by wong the Spring Book Commissed Line Interface (CLI) or by using Sharri, Gradle, and green Agrector Aux. This obspect has storp by compressions on what would in he share to set up your recommend from the commissed line (through using Spring Treet on include grand Devolupment Decommend (DMC Larte presented).

#### Installing Spring Boot CLI

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#### UNIX OSs. Linux, OS X, and Solaris

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```

After a families, you can ensemble the billioning line on the tile will command:

```
    control "SECRE/15 (Kennettrin/Schmus-18tis.ch)".
```

Their make one than the pole amount is writing to executing this like:

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S. rath marriage
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```

Ment, of a time or manufacture Spring Robert LLE, inducts you also be executing that contrarenally

```
Block install aprenguest
```

Obout the CCL is matched, you can one it if more pluggeout alaying recording the restant:

```
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Saring 511 value 2.8811888
```

III Note: You say the the name add parentind to metal throby and Gradia. You can mutal thisse two by meetalings and a rate for the factories.

There is another 1953. The CK appins radiof homothess: The method manning developing for DS X meno is they should mentil mesenguents from the DMX/Lamin world. One of the homofus of their in that it has a samilton that describe a principle with your proper.

On the Equipment of the http://firese.sh/ web size and made name about the purposite and in order to make the purposite and the control of the second forms.

Firsty of "Straig! (6.3) Hitta: //www.githuburgeomited:.com/Nontherns/idutall/maxter/factall/!"

Obes of timeline meaning, follow the more more to as a proveiting from the command has. The might word to open a new terminal and not do a wager over the shade profite libe to get a working although if you have the broad regions, you won't need to do this food the structures will be subsequent to the form the structure of the subsequent to the subseque

- f hore imp previalitam f.more initall cominghout
- Hydroxian a Limit town year and which being hydroxian get name that a thing (//home.sh/11mithornal) by an emitting this community
- 1 intic -e "Main1 -fr50 litte: //ram.githubuserruntant.com/Nemdiriw/linusbrow/gs/InvexIlly"

Then our are the same command them about

- I mine the provendities
- I been imitall enriqueme

The Fe Jil Harrison of the estable broods in standing the Lange retirms as that provides a most eness, a because of the authorize in providing in very boson of the lange.

III flote Tou san also use the him continued to here! the softwee that we are going to use in the next, granters, including PuzzellMD, Rietti, and MySCA.

#### Windows OS:

Divorsing a Whiteham was at which the south town the greenous meritarist, you must describe at the 20th hours. The other way and represent to These are the bulks of referred 1.2.2.

- http://reps.ipring.is/relawre/erg/spring/singsoid/boot/spring-boot/ =11/2.4.2.8E194E/Applay-bast-clibs.j./8E194E-54.2ib
- litte://rem.accing.la/supshirt/org/saccingformeank/mort/saccog-bint-clif.

There links are the burnty remains, but along worder where there in the country from you make that there is the tribute of tributes. Also make our to setting some FATA creates, which includes the table to the tribute of tri

• Note: The binary distribution contains a Secrety various, so you are set if you want to run Growy surpression over you're more contained as a surpression of the control of the contr

You have the Spring Beni CLL to what's next to the previous a hapter, you also a single risk application is written in Sixons and live, and the new this yes many to be executing they commund.

```
$ ninting too *.groowy.
```

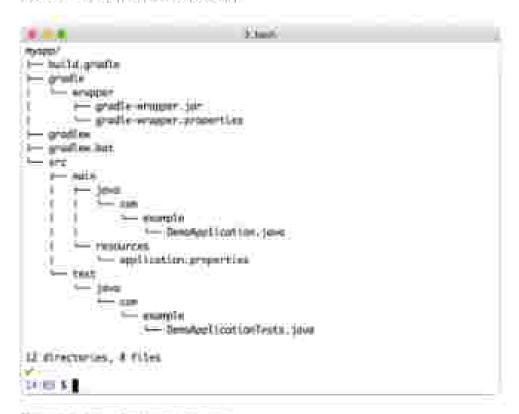
벮

К призидани 7-дина.

But there is more to ju Not only to the Spring Blant CED useful for removing the application but trades manufaces and creates the error arm jum need. For example, you can combe a hose or minimal present by resembling the following:

```
I rectus with . build gradle mono-
```

The constant will call the web serves with the 7/atert apring, in this is the meaned in the following securities of this chapter | sind will treaty a folder named raping. The project is Conflictuated, withough at your deal touchable the results agreed argument will be definite receive a March biased project. Pagner 2. I show the agreement of the project.



Pipper 2-4. Arrong Book import attachmit

Figure 2-1 shiese you the Soung Boot proper substant crowd while you execute the spoint in it remained. If you would note however, such as well, IPA, and Marin property, you can execute the stillering remained.

```
I survive that when the built than leaf - built names ready in force
```

This common will a some a Spring Book Massen project and tell and held off the necessary depondencies to the post-and file to make a lighting flow such angle about 10 will include flowers or funding such files (this will nucleable the nucleable flowers provide the production of flowers provided flowers of the second of the of the s

Den't every been much about whereast those dependencies of those they atomorphic project, you'd become upon about this purpose the project you'd become

New you are set to total mong the Special Book CLD with Growny or layer and can come preserves applications. You can use the Special Book CLD to carries "production made," apply, set a layer product on how you seempty our monotonic factor and the set of the chapter and layer shapes.

#### Spring Boot with Maven and Gradle

Howevery methods in the process and the story of the formation of the process of the mode for an indicate the story of the process of the story of the process of the story of the story of the story of the process of the story of the story

#### Using Maven

Limiting 2-1 above the new, well file that your annevery time you need to come a ligning Boot app.

#### Disting Tells printed in

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unling to it - "titur//www.inj.neg/2001/OllSching-instance"
             as a trahemal or at time "bttp://www.apache.urg/PAM/s.s.s
             http://www.apunter.org/wai/passon-4.4.0.asd*s
             erodel/Verrinus-8.3.5-/toodel/Verrinus
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                                       minking two
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             Z/Orithb-
c/prejects
```

Listing 3-1 shows you the managine owe, self that you can have become Spring Band application. Uses take a chosel back, there is a sport of any author where you meet to provide the spring best of texter-purent actions. This purposes the provides a seniors off you need to one year app. It contains all the description of the foreign description

Another suction is the starter jume, where wooderings the deprintments of the around Spring Book is as an account former than the definition of the deprintment of the around Spring Book is a starter at a fact in The starter jumes will brying all the dependencies that you need by poor application, which is why you need to around a justice poor survey jume. Not commute, if you are assuming a subapplication, the other dependency you would be the application. The other dependency you would be the application of the starter will arother.

This dependency will include all the springs core, spring war, spring waters, and solder Director minutes of the web applications. A faint section of this chapter explains more about the Spring Form Matter prime. At this point, you simply even to condensated that you can include these stopping form that the your and note these stopping form to your main poor, and the

The investment of the Spring Boart Manne plagma and it is included by declaring the circumg boot assess a long to action. This particular program will be promptal age your application as a LAR or WAR with the command was perkage, it also has several pools taken that you can use, like the over at the prevents the person in turning the Spring Root approximation from the program of the property of

This are set mow with Marries. Visit are group to concreption book hypping there appliance through legite in will many you we know all the provided source to use Spring Date.

#### Using Gradle

XX-track into Gradile [http://gtaille.crg/) to minimpile, that and bould highly Desir appearant over Modelic, you would be have a granular to description has a making lapting Desir applications. See Lineary 2-2.

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jas';

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    mause ( 221 'http://reco.spring.infunapsact')

improduction

// startor pure dependenties (
    // startor pure dependenties (
    compute( 222 'srg.springframescok.boot;spring-boot-startor')
```

Listing 2-2 shows you the annuquenched list gradle file that you need us one or our Sprain Boot applications. The first section procured in look at a the toleration of the dependency of the Sprain Boot grade program. This phages common the parameters from a common all the base dependency or and the make that well but you commodify run, and jurilage your being Boot appeal to determ a commodify run and jurilage your being Boot appeal to determ a commodify the section being the Gradle tool will book for Allines. The section that provide all the binarios meeted by the dependencies are section that wile found.

Next to the section where you appear the program, on the case she specify plagan: appears been. This will not the sixth commone of these. This, either you are conting a far are a ser electrical and the remains the function of the very last. Here is the papear in the section, where all the dependencies can be found to be decreased into your commonents. Finally there is the dependencies we can be sent or you put of the same power of the form of any spiritely financies. Both regarding heat extended the form of any spiritely financies. Both regarding heat extended to financies, the final the same of the form of any spiritely financies.

So, for managing if you exam to create a writing plot above with testing, were need to which he following in the dependencies for texture.

As your names the Spring Book resist (period a corp way) to fishing assuing common his aff the strayer prior. Note that you don't need to just page dopperature; according because the explicit prior will have easily that.

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• Note: When using Gradie positive the Gradie waspies about allows you to have a bintery Gradie when you wint in the tours and the computer doesn't have Gradie. See http://www.gradie.org/does/computer.org/do

#### Spring Boot Using External Tools

You have berrund first to invest Approximent CLI to and County or have for your aggre, and you have soon the managed for he ration deposition as not for proximent for he ration deposition as not for a country of the same of the years a proximent for the same and the years a point of the same of the years and years are not the years and years and years are not years and years and years are not years are not years are not years.

Well, there is a boil, but you can use while who jury 100. The bound many crimed a petersor's architecture well percent as a complete purpose with all the dependencies that you need.

#### Spring Boot Using the Spring Initialize

Toward hind this reference of clumetum schopuraristics://seast.opering.lp. If it is noted by Provid Web Secrepts. Right note at ken as second awarden, it provides a simple vention (Figure 2-2) and a following (Papire 2-3) and footblook great:

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Paper 2.2. Southernood the broughtmaker (http://stort.ching.id/

Figure 2-2 since was preclude where you can excess your Spring Boot application. You can proling all the dependences by part typing men, sewers, or you drying the Comercial Propert bottom, are well get a 200 file that contains the countries and the part, will no will a grad to file; depending on what project type your choice. Showing the wines the Spring Boot years and the prognetioning singular to the Comercy of his your

Figure 2. I above you the full receipt of the Spring Limitatic and if you keep to sulting drove, you will find all the repeat encirs that you can you can be elicited by the behavior of the characters. After you weller the feedbars you can't in many affection formula Project human to get the 2.12 life that common power project.

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Plymin 2-40 Field (empire of the Richard Institute

#### Using the Spring Initialize with UNIX cURL

The Spring littrality can be accrossed using the UNIX ctill, command become at the end upon set service and respective a RESTER AFE. So, for example, styron screens to make a simple project that common just the minimum files, you would execute the following command:

```
$ cits? -a bittps://start.apring.do/atarter.pip -o wamp.tip -
```

The constraint will receive a repay, xig tile that constant all the stratement for the therap According to app And, by separate (contains a finite project with the post and a fine a temperature of the post of t

If you note the attenuate storage to a famile based project pastered it for following compared:

\$ rund -s bttps://starr.spring.is/starrer.cip -> resume.rip -d type-gradic-project

With this community was will have a Tux Lid, gradie and a Gradie arrapper. They will be by you or compile, books, and may accompany the grappin with our horney to main! Conflet.

If you didn't in cream a Spring Borriage Heating with a real-feature, you can execute the following

\$ one3 -s https://start.spring.in/starter.sip -c emaps.bip of type-more-project -d ...
Support of type-more-project -d ...

Using this command, you will have anyone per and the fact spring-board of latter semiconductors in producing the medium power will be a few powers of a product of the latter semiconductors within some dependencies, but one product the other has a recovery the following community you want to be belowing as a see and

T puril -a Witten (Armany, aprang, in/pos. wil -a puck-gring-sing -a pan, wil -a: drawning are sent, data - the

The command will gramme only the part, whi with a WAA parkings type and the apring-boot, at atterser and the apring-boot, at arter-date-jps artificial (Fyou will the write), grantle till as well, you summe the bill-selection command:

1 carl -a bitter / Astart coming sector lid gradle -a health gradle -a dependent for some data- law

This constraint self-genomic and finding letter as a 1404 (160) in the definite opinion, region services from the provious command. For an process on the letter provious command. For an process on the later beyond the services and the letter provious and the letter process and the later has a process on the later and the later and the services and the later and th

Note You can pet more details about what other aptions you can but other executing the call is command. Just executing to command: a cost exact, specific.

Notice that the -a option is used in them examples. It allows you to follow the collic command to be wheel, and you can remove it and has the progress of the ZP the being diswoluteful for can get must information about all the flags shown in the culture summies by Coupling them or executing the feature of all command.

#### Spring Boot Using Spring Tool Suite (STS)

Hyperact closely among the Echipse Hill, you can morall the NYs is a pinger or flow about it is explosed to a continuous explosion of the continuous expectating explosed for a continuous the different appearing explosed for a continuous explosed for a continuous explosed for a continuous explosion.



Algeric 2-4; Among Dorf Salto (EPR) and page Dittars://intingilin/bails/starle/))

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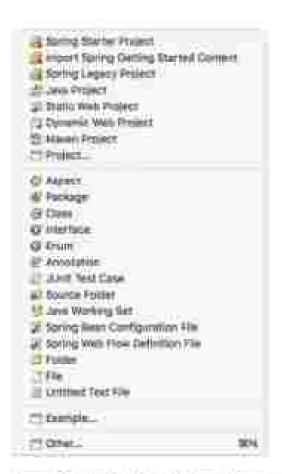


Figure 2.5. Champilite № Sinc № Agenty About Proper

Memorica on the Spring States Project spring, the Spring States Project season was appear. The iswhere you put all the ignormanian should your Spring Root project. See Figure 2 in



Pigners 2-9. The forming bigories Property against a juneral information about the National Boos project.

Figure 3.4 draws you the first page of the season school and some other Materials occupies. Open of the season of Goods, the page (season), the bagings (box) of Goods), and some other Materials occupion. If your ship. Next, the dependences your appears for fugure 3.7.



Figure 2.-7 shows you the wan page of the second, where you arbed the dependences the your applies from and the service of Spiring Worth 1600. You must have the base computer (And if you chick Sea), you are not the community of your Spiring Motor proper. See Figure 2.6.



Olganic 2-A: Turning training Project occasion -- Lamonary project

Figure 2.5 shows your die limit very and namentry of schot the mount will generate, because it green and all the parameters that you can use with the cW1 command. You could every poor the which 1005 in a horsest and general 2006.

The byroughtures Project second will developed and incompress in the horizontal and out the second poor with the Special Basis project non-related. As you can see, you have another opinion to create Spring Book applications. One wither enjoy benefits of image the ETS pother is has support in Expering Once. This means would support and (note to implicate a support for the applicant are properties and the input to at large and the input to at large part of the application and the input to a large part of the second of the input to a support of the input to a s

# Your First Spring Boot Application

The hand in community the Expring Blowing has interested the application is empire—if a neutral application. The will start with converting structure the elegant pure execution to get to know the Spring Blow paternels. Our age the restor from book, you will assurely use at the end problem a configuration and problem is also spring Blow.

## Spring Boot Journal

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These peops show you have as coming the lighting Bern Janeau Application image the STR:

Open the STS and several Me > Sever > Spring Startet Propert. You can add several package name of the group of artifact for Synamous I, package of make open to other house of the language. I will not built port, sell and built in gradie files, so you have all the dopen decision this appropriate. Severally and the overexact prototropion, which Since to move to the dependencies page.

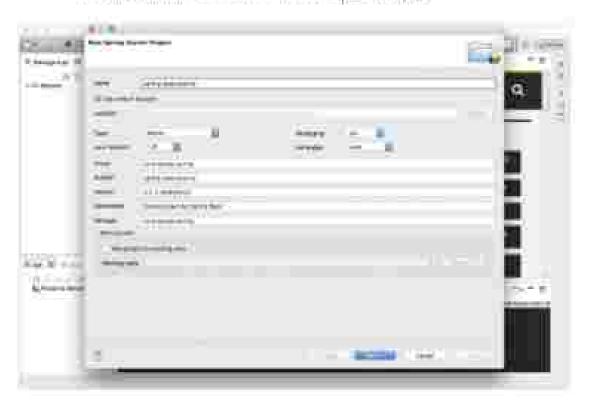


Figure 2-W. Among Linear programs. Spring James journal.

#### SHOPTES IT IN TOWN STREET SPRINGS BROOM APPLICATION

Figure 2 A diseasyon, the line page of the Spring Source Propert winds. As total better, you can put whatever inflammation you like. The supercine part conditions some point of our source points without along the without the mineramonal med in the example.

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her Eighte 2, IIII After chemitig ymic dependencies; gen can sistic Tiordi.

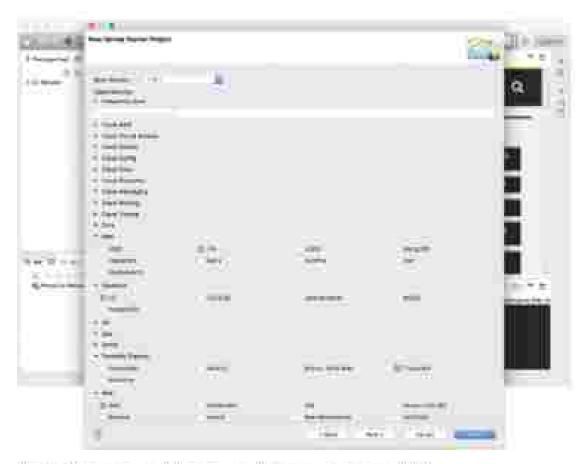
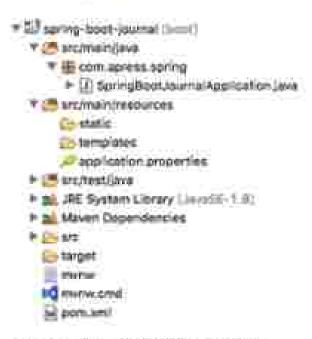


Figure 2.10. Survey Survey Property and Aspendian on Survey Survey Survey

Take a back at the property file extractors. You who upt have second famp; should not remain a 21.



Olgany 2-32. Setting Boot journal progent networks

 Next take a book in the pure, exhibit four secong necessed. Transformit have superfung the Learny 2-4.

#### Linking 2-2 proteins

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Listing 3-3 shows you the post, and at the surrest price that you other had be dependent on the primary flow dependent as section, which contains all the screen price that you other had be dependent, former, for you are going so and a web reclaiming from ipping their primary as a paper one, appring boot, starter arely, a troughlise enquire (The contact, spacing boot, starter arely) that will repring the ATAM, pages of the promotive pay a transfer of the surrege boot, starter and a promotive, a former of the surrege boot, starter and a promotive, a former of the primary of the promotive and the promo

Wysocsoferind a Goodie project, Dienny 2-4 shows you the builed, grante file.

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Alway 2-3 continues openightents to unotion

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### How Spring Boot Works

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# Summary

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### CHAPTER 3

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# Spring Boot Auto-Configuration, Features, and More

This chapma will a shout the Spring Book harmon that introduct ordigizations this stakews you be supported by Spring Book some or he was the supported by the s

# **Auto-Configuration**

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# Disabling a Specific Auto-Configuration

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# Spring Boot Features

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- SpringAppLication. This class pure site the benefiting for the Spring Hims applications shad to mentated in the many ow theat. You need to pass the class shad will be extended.

Note: your interpolate to metrous management Spring Boursepp.

### Spring Application Class

You can have a name advanced configuration using the Systing application, because you can come as instance out of it and do a lot from See Listing 5-10.

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### Custom Banner

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E . CHARM STREET, SOURCERING

#### THES IS MY OWN BARRIER!

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Figure 3-2: \*ttp://mtnrjf.com-mrt in Abf. Hart givernore.

Figure 3-2 shows you the bitter / Apates fit that she from our click me "Text to ASCLIAN Connector" link.

Once provide them, and the sent "Pro Spring Bloc" or the rest (left) or relativest (red ascur). Then also kell in sent all the statement ASCR are See Figure 3-2.



Piper EA ARTEST

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#### # ... Unama way key-bloom trun!

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# SpringApplicationBuilder

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Who can immore any well-explanation are a suffiguration. Becoming that Spring Recressing is given what him of pipe produce remaining bound on the characters, and for each epp, the eigenforce every analyst imagine that you are money money that services that consulty control without a well-economic and generally one can without a well-economic and generally one can without a well-economic and generally as a such

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# Application Arguments

DUCKNEY THE INTEREST SHIPTORY

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how can prove the args in jerns hears, her Listing 3-54.

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```

When you conditioned a contains Option ("enable"), it will expect the algorithm to --- carge, or to Linking 3-54 and the expecting --- contile. The performance in Args will take other arguments. To entite you can exercise the hillioning community.

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    Southeads see the lead ## o feet and emille this year margin of like flow.
```

1 / Joseph (https://mot.rup) (Trun\_htguerent) - (httl://deg2)

# Accessing Arguments with an Executable JAR

To a laise the apparamentment a manifelium app on the form of an encountrie (Alt ) possible apparaments in the charge of the properties of the following command:

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This command will receiv an estimability IAR, makeing that you can the allier fine.

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1 pms -tar target/varing book a buile 0.0.3-908-907 par
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### ApplicationRunner and CommandLineRunner

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#Spiringhowtopp1toption
mublic class SpringHouthingDalogolitation implements CommantionFunnet, ApplicationFunnet
        private static final logger lag - Lagger actory antlagger
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        public woid run(ApplicationAzguments args) thrown Exception (
                 log.info("68 > Apriliation union, Implementation ...");
                 bly, bitte! Accessing the late beaut. " + tofa);
                 map getfoother mentage(). You keet (file or log. or fo(file));
        30
```

#### \$ . Jennie apring-boot rem -firms arguments-"args args"

This almost the the logs for the milk bosis shift the privilent of the algoritemic place of Listing 5.18.

Almost unrules may be use the Connect to the bosis of the algoritemic places.

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History 1/16. Version 12 of accession/Securitaria/aptern/apraing/herringHest Simple-Scalination, power
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        Т
        Maar.
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                return "Bert a simple Etring bear";
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Listing 4-10 shows a surficed that's aimentional with the phase aimensional extracting a Comment to extract any determination. This example uses the later Pappara (Tempola ) to do the secure. You can will as easing membral that extent a Comment lists are not any wint at your event to execute these in commental type can now the six plant any extract in start to six Listing 4. If part execute the same execution is before.

```
True lysts "extension of the latent with "asyd asyd"
```

# Application Configuration

Developers have that they are never group in get and of some application sandgemeters. They will always be broking where they can person trible 'IPs, a potentials, and develope information, for example. Manually may thin they manually use quite afron in their applications. They know as a loss procure that they ment to avoid as hard-order the kend of configuration information. That's objective ment to entermine it as wear he considered out easy or one and deliles.

With Spring you may use XXII. multiles scotters property places the like it may me you may use the Property Source amounts it is drawn your properties. You stoudy (source a file that has them elections forms have allow much early my family but with many properties.

Spring from his different operanche manageyour popularities conditionalisis.

- You must be a the matterlage blood are properties, which should be likewish in this
  most classepach of your application (frame are made places where you can add this file)
  this you illimits about block.
- You can mees TAMS, recognish the respect and transfer, yet this whice results as be located to the resource in the father are more places where you can appropriate you'll been about home.
- You said use surgicomments contribles. This is becoming the defloid pointies for should a securitie.
- Veil entir due brittinment libre regrutteeren.

Remaindant that Spring Door is in application or an investigate of an application to integrate or in two-door a common application, properties or application, yet the Union a specified, it about the mean property and the an default. You can get the compute historian common application properties there is follows: spring in application to a few formation for the common application properties that follows: spring in application to a few formations of the location properties (find).

One of the best leading brown Spring and of recent from Spring Booten well in that you can become the projection estimator of you for projection across the projection of the

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If you that I want to me the application, properties, we can make the properties we the command line.

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1 jann - jan tanget/sympt jar -- duta (ervet-treatment))=|=
```

Now will get the same nearly they waken take the application, properties like as you have the TAML section, you can also use a specialized environment would be according 2001 ICATIN 1520 to express the name properties until to colors. For example:

```
a Switch Americanium 2004-10 "data": "berger": "menterarren: 1000")). Inco-che backet from the
```

You amstrout the RPTML applitations 1500 years the behan you execute the jacon. Just or the Maron remained JAgon, you self get the same mail. As you rais see appling being personal ways to express application properties.

# Configuration Properties Examples

Let's commit uneph-protect that will liely not understinit the application contiguousis:

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$ spring init -g-com. spress thing -a-moving-boot-config --amkage-com. spring --aming-toot-comfig -x
```

This command Sefferiors a simple Meters Jacus purport Refere continuing seffection project, you must have that typing their piec on order if you want to overside your ppp from to a nigranium progestion.

- Committee ingrantum
- SPEDIG APPLIDATION USING

- TMTF (Divisormanery)
- System petProperties D.
- OS mestimment traditions
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- Application programme (application, properties) suitable of the purhage SAB.
- Application properties (applicant ties properties) inside of the paction (Alt
- #Propertylimizer
- SpringApplication, setDefaultProperties

As you can see, that's the make he country give application properties. Fill there a little on the "sounds" and "possible" and "possible" and "possible" and "possible" and "possible there are application of your application of your application of your application of your application with an own application properties for will have proceedence over the application properties that is an the fall there.

Listicular rigitly timps uninequies-

### Command-Line Arguments

Go to your property that you shall with the Spring first recommend that the mean above to be skilled Harring 5-17.

History 3-17, Ann Smale S Secrement Superior Superior Secrement Secretary Light Line Laws.

Living 3-17 characters from the main class. As you was seen in a using the #Value ("\$\(\) reverse. (p)")
amount on This amount is will mainless the sees "\$\(\) arress. (p)" and (c)\(\) know for the property and (c)
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2 . Januard and the provincing post-conflictuation of the provincing post-conflictuation.
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Springhootie figApplication v0.0.1-184500f on linkage lucal with F1b 97098
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mark to metable profiles metable
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23 28:44:34 MST 2016); root of context timemotive
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                                                          : Registering Sema tim Its
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Lining 5.48, ant/minimesores/amplication assessmention

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E . (www.samene-Souccens.)

100

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t ./manu aprime bout irun -Dagring medicarium, pum- ("Server":("ip':"saiibb.is;.sq.:#"i)'

101

\$ page -page torget/spring duct-config 0.6.5 SMPSAUT.pag --spring.application.jage-/(Serves f=(Tap\*:Task.tak.tas.ta\*))

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Tolk will see the rest 5. The Series. IP 121 192, 366, 343, 92°, Guezan also add non-continuous variable that refers to plant purpose, like than

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You will see the text." A Thir Server, D\* 141, 192, 168, 150, 45". How does figure floor know that the minimum out contrible account to the terrors, to property.

Bote - Hypocare siting Windows 95, 48 the environment sumation must have the keyword of Etahire the velocitie. For example, corp. Set SURVIN\_EP-oppinith, 250, 48, page 1945, target number burst configence, a statement, page.

#### Relaxed Binding

Spring floor pass reliand rules for hundren See Table 3-1

Tiobbe St. E. Spring Blant Belleved throlling

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## Changing Location and Name

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m

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1 SPERK CHATE BANG-racks take - just target/spering-book-conflig-0.0.1-SHPSAUT, just
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You allocate the rest "a The Server IP as "17.0.00.1" Record determine include the properties with the many because a will internet willy too it (seems but a \$600.45c, you don't need to specify the extrapolar transfer on the street of the extrapolar country.

solding many manyer against add a by of g. properties for the content is extern up the added to Thompson of the first time that was sold the following

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E. Andrig - p. archesing resources/PETS - DEF, conf.
E. cp. cimiling topy fig.originations with health/resources/PETS - DEF, conf.
E. Andrew claim appring the charge to Departing, config.originaries and typical departing config.
Lacations of Lacations of Lacation Action Config.
```

To be about the sear in the Server IV is a \$27.80.000. Tay to absorpe the value of the property so you are see that the building or the this path. (Second to be will print any error that says for entire or File, not intend to the chargest income and another to entire the properties also

- wlasspath
- classpethologettis
- Blen
- file confine

Onless you change the order with the spring, config. Decetion property. To change the because of the properties this you need to set the \$983ML CONFIG. DOCATION encountered exclude:

II Note: If you are using Windows OS, this start in 1, for crimbing directories or copying files.

#### Profile Based

Since research it is the forming from meets above a continuous that allowed decomposes in contact community repertment and beautiful and provided the authorized community or provided the provided of provided the authorized control of the provided the p

You can see the properties (for each, the Squart, spy Light to - [profile], proceed to Coupe and the injury on fig. addressely spy Light to - injury earlies and spy Light to - proc. Properties. Or now the common of early one.

- mindelestion-magninesties
  - server, in Smuliner
- application-grading perfies
  - (erverito-Http://www.emute.covvex.com

New someon may progress up to the following:

1 . Jeans close queing bout run - harring graftles action-gind

When you wan you the command, take a look at the beganning of the buy. You should see consection Herning to the hillers my export

```
CVILLIA RELEASE
 ... Spring Boot 11
Daily 1242 - [r] ... Confleyer Hirstin
                                        Starting Serphyshortuntigscollection on Linking.
                                          Incab with Pill 2243
DMFD ISAN -[m] ... Configurpilitation.
                                        the following profiles are action: grow
                                        : Refrecking American Configuration Contact
D(00 zinz - [a] ... g0pmlicution/intent
                                         #646a61atty
                                        : Regardering beant for 300 expensive us storten
```

1960 1349 - (n ...Rammisporter 1960 2343 - (n ...ConfigApplication ( > No Server IP is: bttp://ny-rameta.aerver.com 1990 and [m] ... family option in Started Secientian Confunction in 18, 1, 580 meriod) DARG 2042 -[ 1] ... appulingtion Center: Claying \$690abjas

DAID 1243 - T t. .. Sembigueter I thing is tering Ski eagused beans in Abuttone

2010 officially set the lement that result ("The Fellinging postlike me metlos) (post of set) numer the profile application properties arrest (application production) in the "> for Server IP in http://www.temete.organ.com/. As or encouse, my makinge the name of the application-prodproperties to our to prof. proserties and the qualitaties on properties to swife on properties; and me the lighing conjugate that will get the new name. If sometime is example more profiles, it will get the definit, i which menos that it will gray the spullicution imagest uss.

# Custom Properties Prefix

Surring Bent affirm you to style and how sourceme endering properly profit his sense properties. The only thing you are a trial to all the amount of earth the #Cent Figure of Liest Engage Elies amount atoms a lively of any thing will have an Inge and groups as their purposities.

Western many the EDC tem, I overnment assisting a dependency in your got, as I. This dependency well-category accepts amought work it will reagant the entired's earlie promptetime for the properties. So add the next dispendence in your 2019, unli-

```
compression and a com-
         agroup Tolorg, spring framework, hnors / group Tes
         -(artifutLifuguing-boot:comfiguration)(tremenue//artifutLife)
         espenneal) truncapetional)
i Allegrennleski (VI
```

This dependency will allow you to proceed your conjugation properties and how a circle completion. New, let's bee the wantigle. Mostly remere /wais/resource/applifaction.grouperties file in look like Amilia 5-25

```
Hallog 1-10. corrective recent and limitary prosection 
exter. Sp-107.168.3.5 
eguptiverser-ip-292.168.54.50 
eguptiverser-ip-292.168.54.50 
eguptiversery Corfus Ann ecomple
```

Linking 5.19 shows you the application, properties the. What a new a the extend block, where the cutions peoplettes with epopp as the professor deliced. Next, agent joint town appelles and oth it to be a like through 1.00.

Halling \$-20. Westernil of any fricks furarism agains (aprileg/SpringflootContigSpringstration, form

```
DECEMBER TOWN STREET, THE LOW!
amount compatibility to give a
import were wifel, soggest before;
count sep, springflumswork, beans, factory, amoutation, Autowires;
Liquit Sig. spring framewilk, bears, latting, countries, Value,
senset and appring framework book Commod tresumer;
innert and surjective framework boot for ingland literations.
immust arg. springftmmews(k.boot, Autgoomfigure.SpringDog(Application)
impurt erg surlagframesark.book.cortest.properties.ConfigerationFaperties:
Sennet org.springformeatk.context.accordation.Rem;
insure organized transport, stagestime, Component;
#Springlag Good Leaf Las.
public class Springkortlowflatentication 4
                       prinate static Lagger Ang - LoggerToutary.ortLaggerISpringHoutConfigHallication.class %
                       Program of Table 18 Program with a series of the control of the co
                                               toringApilication.com/SpringSoutionFigApplication_class, argst;
                       Fireline("1(myapp.server-ip)")
                       String aurentin;
                       #Antissized
                       Mylophroperties props:
                       Communist, from trainer, we live ()
                                               pretions area to (
                                                                      log in fol' > the Server IF to: " - serveriol:
                                                                       log: in fail* > 6cm Names: " + proper_grd Name());
                                                                     ing in fe(" > App lafe: " + prime get@eacrinfilm());
                                              31
```

```
#Campioniant:
#ConfigurationProparties(anofix)"evapo")
public static class MyAppProperties (
        erivate String name;
        private String description;
        private String serverly;
        public String getNinn() (
                peture ease:
        public wold setMann(String name) (
                this name - name;
        public String getDascription() (
                conces description:
        public wold setDescription(String description) [
                this description = description;
        mobile String getServerty() (
                return serverly:
        public weid setServertp(String nervertp) (
                this sevents - serverise
3
```

Littling \$-20 theres you fire many apprehent Lev's examine it:

- #Widned\*\$Gypupp.server-tp\\*). The minimum on this a eyopp. retruer-tp: which means that the value value equal to the NGS 34.56.
- sAutowired NyAppProperties proof. This is exciting as automoral the Praceparties type
- SCarparent &Carilly cation reporties (pre Els-"sympt"). The
   SCarring ratio Properties announced by Epring Boother the class will be
   seed for all the properties defound to the application, properties the charten
   the symptomic Meaning that the directly required when you have sympt, we restly
   but spape, server 201, spape, same, and syour, share intime. The Margarett
   uncondition a proof to trade since the class is probed up as a boon.

The figuring Point many religion to the determinant properties in the effect for an individual temperature.

The figuring Point many religions to the determinant properties are the effect for an individual to the expression of the effect of

Name of great ratio, among apply, even wherealth see all several regular paraphetrises:

```
1. Jumme : Lean spring-wort:run

) The Server IP in: 257.354.55

) App Name: My Cunfig App

) App Date: DALL in an enough
```

91

As you anneed, the hore allered sequinous for delay some application configuration conjection.

You have a vicence of XAM examples through and frying some or are the XAM, symme, bein to the Hang liber downsearched by sexamples.

# Summary

This is improve your a wine of the Spring Black apagers by explanating the same configuration for mire, including how the School Education Figure is an automation south festion for somes. You introduce to exclude some of the approximation (times as well.)

This becomed allows single of the byeng boot features and how in size the applications on tigorism or properties. You also bested how to calmande your applications continuously properties to adding a profes

The arest chapter count, the Speng CLJ in more destill

#### CHAPTER 4

到批划

# Spring Boot CLI

This chapter discussed a Spring Best incident can believe to our protection soul production lends expressions. The lead of particles of the Spring Persi incidence, you performed to the first chapters. The express blacks of Conference to the first chapters. The expression of Conference programs or depositionary.

Carathing aforming Principle Configuration (CAC), for manipulation of the configuration of th

- % forms the provided the
- 2 frew install quringboot

If powers using Linux, you can see the additions seed to the collection, (art) and build to with the following community.

\$ mile citricial I improvement

All the examples will be juicke and Greens. There is not end discountion between one language as another in the sense of compile, was, we produce. The wall difference is some term processed that will prove to the continuous law. And do it wearly the marks, you know there in a compete.

# Spring Boot CLI

The first line I seried to man hipsing Roos, which jour amount trace years ago, it was the hist arginal collection of the many point of the hist arginal will a line. Solid collection do you kneed, highly be was a making that with a line. Inter-of-collection you can be a web application without a Groovy on and running. If was margin and account.

Now to seeming 1.3.5 GA and 1.4.5.55APSINDT, it has more optimes and an interactive significant points are more. To see the CLI in detail, not benefit to consider some simple rearrighes. Let's start with the more in Leoning 4.1, which change the femore remarkly forms pressure challengs.

```
Along 4.2. appignoss

$AvetCotroller

#Jan's HenApp[

#KamasitHappIng("/")

String greetIngs[)[

"Spring Bant Rocks"
```

Limiting 4. It willows you the sprighted Genery with applications you can have and that you can can with a Spring from Nove, love weather write we brapping position and our Set Limiting 6.3.

```
thiming # 2. We happy are
mackage consequent inverse;

though any spring transmore boot, but legaged tration;
though any spring transmore boot, autoconfigure Spring to the time,
depart seg spring framework beet, bind, meant at int Each Controller;
though any spring framework beet, bind, meant at int Each Controller;

guest importable and interpolation interpolation that it is the public class beindon;

### Property (Page ing ("/")
public static with main (being ) in the static with main (being ) in for importance limits of the public class, and the static with main (being ) in for importance limits of the public class, and the static with main (being ) in for importance limits of the public class of the public c
```

Listing 4.2 shows you the Jeru record of the approximate application. As transported, upgage 1000 intelligence the provincial of the Section of the Section

#### The run Command

The principal mand will allow you on you for all Grooms Aprilia 1000 applications. He spring is for biffering

```
spring our (options) offlers [--] [args]
```

The untillable options and

Option	Cestilities
-artszetűpze (Amileas)	Anish the control conditions from examples consider control. We assume that about modifying per distinct and him exceptibing south by withing the life of the formation of the companied blacking from him to the companied blacking from him to a more than a first per a first built or true.
—tTasshittly sip	Addition the chargeon courses, and it's quetal joiner you have that i party.  Additions As a recommondation, year are comise a Life fielder or the resolutions groups and add of the clauses in Julio there.
	Over held attimped to green the depinishmetres. This prove following year among one the afficial value of our poor applications.

(feminimine))

Option	Description
	Does not administrate guess the amprecs. This is accordination, post-inter- dline By an initial some of the ampeter in prior Convey oppins which. For example, you have appropriately use this oppins because you are improving the choose procured. There is more about this (a Chapter a ( ) it the 2001 configuration solitoot).
-special and a second a second and a second	Opens signing to abber would, it won't praction that the conomic large everything. It is not full for second what a guilty on, because a show you resent for some participant on and what is sufflage to the programs. See Chapter 2 for more palacements.
-wate)	here a periods to the Weta The abaseges. If so switch when provides transmis- surplement repetitor approximation

So put the Garney application (shows in Linning 4-1), you wright earning

#### E appring the soo, granvy

Descripting the command, and will him a sink application up and mining and to insing to persist the description of any contract to insing to persist the description of the contract to the co

1. mining you say growy -- - server mort -8888

This recommend will store the web application and a will be interest in prestition, there, if you prove to add count that he party library and built the dependencies, you sample seasons:

1 againg one -up lib/ealth. bet amagainty

Management to making him application (Liaming 4-21, margine excessor).

Bergenbille zum biebliebt bereit

#### ■ Note: Wo can stan your animonium by pression Circ+Circ your keypount.

If you are naming a Jim's application, it is important to add the package knyword, find don't reed to have a howevery or create any directions. If you don't add a package to Spring Boot scanning if will be impossible to our your app because it woods to scanning all the impossible dependencies of Spring. It will can't scanning all the importancies used and and start from the country separations, as be careful.

If you laye several they, you was me the without 4 or completed of their first execute the community

Counting our Carroney.

If, for some insure, your need to piecel the IVM will be uploine, my care exercise the julicious command.

E DAVA OF IS 4 PRIKED CREEKING HIM HOP-BERRYY

This community will unique the minimum beautiful to 200 for the applications.

#### The text Command

The Sect command may a Spring Cleaney script and how senio, the symbols the following:

```
spling from [options | files [--] [args ]
```

The qualitable approximates age:

Орбан	Description
-mteconfigure (Mooleun)	الأحداث واللبيانة البنوسيسين والساوية والتوارية والتوارية والتوارية
-tlassidt, -rp	Adults the champorh services, which is strengt whom you have third party third years. As a resonant confution, your cap control of the holder of the month your program and add the champons or SARs there.
— ne-guess-deposition i.e.	Does more through to give a thir deprovidencies. This is morticled to have been about your the pears and more the your applications.
-nicginas-Diperta	Open our attempt in given the impores. This is much I when you strength on hade very of the impores in costs Current egypts stifted. For example, as a face upper pith much this option because you are importing this choices belonged. Been passed from the process of Cospect Asia the ages configuration section).

The many test, you need a test right? Listings 4 × 4-1, and 4 × show an improve using the well his our Handand Speck harms—14.

```
Adding A.E. Heartmoody

times Nyffert()

yfort

which should() {

String are— "North works with Spring Rose"

materification "North works with Spring Hoot", tto
```

Likeling 4-2 status your than chargered must meet, and Wijmorcom assessmentary countries and any conjugated tigming them with take case of that, Thirties II, principles

```
$ spring best torribroom
```

Take a fortkind the Nijock hand tear shores in Listing \$-4.

```
Ekateg 4-2. vjosči goovej
```

```
pCrsn("org.spockframmenrk:npock-crsn"1.0-growy-2.4")
input spick_larg.Specification
input arg.springframmanck.boot.text_DatputCapture
class SimpleSpockText extends Specification.{
derg.junit.Raim
OutputCapture rapture - new OutputCapture()
```

Living 4.4 obesity on the me of the Speck Empresent by stateming the Specification class and defining the statement. In order to me the lipse k Enterior that we proceed to impose the second statement by adding the sCrab company to impose the second state Speck supendours and in include those dependences by adding the sCrab company that will include the Speck supendours for the second of the section of the se

Linning 4.4 also chines you and of the new horsers of Spring from, which as the Sixtyoti agency case.

Halfest you to contain respect tone Synthes, not and Synthes, exc. In order to sain this ten, process per the same portion by charge the same business of the life:

```
5 spring test spms.groomy
```

30% sugarmation of Same that Spring Heldramor Tabeless Opins is our wholey you are deput that I parts. In Observe, we have make any the Month programme and the correct impact.

Table a limit on the unit test by favor, discuss in Listing 4 5.

```
Chatting 4.55 100/1000 pions
```

Liciting 4.7 shows you're upon test solutes in door. The accept that statement belongs to the erg. Justice Ascept show there are be accessed as single. The containent ring has some contained beautioning and the erg. Americans. Matchines also, and result matchine common strug. The sout rescales once medicaped Capture class. To contain the case on the commons.

```
$ spring test Pyters java
```

Wymiczennie (no) the leab application (Liming 4.5 - app. grants), you and converte code (a.1) mag 5.6

To see that put summed the following community

```
5 during that applicationly textimosely.
```

This command tell are the previous than the WebApp (from Listing 1 1 - app. greery) and dwift as they greet logs, eached to get the same look.

Although these examples are examinely simple, it's important in see here every into conservant run seems must be considered from interface. A special chapter includes a special chapter and finite and throughout the context of Spring Boos.

# The grab Command

The grain command to 5 developed lift the Epring Creary occupes and here deprecionant to the address of the discount to the following:

```
suring grad [cocumul tiles [--] [args]
```

The wealthfully options are:

Option	Disciption
-mteconfigure (Mooleun)	المحج والمرتشان فاشت كمنتوا كرياحة سننسك المدانس فالالكار
-tlashitk, -sp	Addituble champade entries, which is media when you have duet, purp illuments. As a recommendation, you can ensure a label lidder to the record year program and odd the always on JAEs these.
—in-guess-depoises (e)	Does not attricipl to gives the dependentiles. This is useful when you attrick use the strain amounting to your application.
	Drives now amorago on places that acquairs. This is movind school percentionally medically account of the improve as power Common coupling about. Part example, as a large appropriate can use this option because you now proporting the charactery you pred. For remote telescoping, use Chapper 2 (as the contraction configuration accounts).

Why can me see of the factors progress as no set for some contact for grass a commonic. For Lasting 8-4, per contact

If you thank souths current discourte, you will see the reposition of anhalment a second with elition dependencies. The gratic current was in a method when you would be execute a figuring been apply among the absence in have see burners of the gratic and the highest war accepted. The gratic consequence of a program post apply about the contract of the program post apply about the contract of the gratic and deploy it to the chould (Youth) see this suitful consequent in Chapter 13, "Spring Burneting Chapter 23, "Spring Burneting Chapter 3.

## The jar Command

The part command will receive a self-requestion over unifie [4.0.00 (from a Group of fare stript for requests the following:

The youldable egitions are: |

Option	Description
-action (tiper [hindren]	Adebi the pass-configuration compiler transformation (definition trais).
(Jacquitt), -up	Addition throughout existency which is sential action your tarm flood perty. Infrarray, As a more more deposit, you can extract a 1507 foldow of the cool of post program and odd all the classes in AAN three.
maximule (	A partition to final the files and exchale throughour the final ISB like
include	A partiers or find the life; and further time in the final life file.
- de guara desembrações	Does not encupe a quest the dependences. This is useful when you should not the person amount of procession.
- de gues - Esparts	How not around a puece the property. This is included to the second of medical source of the augment in your favores application. For example, or a keep approximation that the approximation posture to the property of the same posture. The property of the same in the property of the same in the property of the same investigation sections.

You can and Litting 1-1 ( app. gracey) and resenue thir following someonid:

New you can third but your express from my uniform that there are now that the you support upp. you, as a support a support of the support of

By executing this command, you will have a web application against running. The part research insuffice application pure training, because you call ship your application and run it is my system; that has how more limb, without according a form all applications commands. Remonster that Apply places will author that have a applications are not as a special commands applications are not as a special commands.

#### The war Command

This is very similar to the previous incomment. The same constraint will civile a seth contained executable will the home a larger of this same, by some is the following

minting | with [options] | (wastrooms) | offices)

The my Babbs warming you

Option	Description
	Adds the aum-configuration compiler considerations (defined a true) Adds the charged entres, which is solved when you have durif-party libraries. As a recommendation, you can conte a little below in the contri post program and with all the allower or SADs there.
—eac linte	A pyriom in find the lifes and maked them from the hard JAR file.
—im lunw	A posternion final the files and pushade thousan the final JAB file.
— m-gann-dipimilim, lini	Done sort attention or upsess the dependencies. This is mortification you already size the picture to consist on a your application.
—m-gmin-liperti	Done out among to guess the unjuries. This is among when you already this habe suggested the unpuries as your growty application. For example, in a later appropriate these then application has been past and more than the application.  The proof indication and Compute 2 the kind of adjustment.  The proof indication and Compute 2 the kind of adjustment.

You explain Liming 4.1 ligot ground for our the way command by even using the following

#### \$ spring wire applicate applications.

After executing the command, you will have an your confoundments the application against and the applications purely and the laborage command.

#### \$ came class appoints

To the previous command becaused the send particular, right's sewing annial be the use for a work plot while, you can somethe WAR file or expanse application constructs file Paintal attended. Withdistress, Jette, etc.

• Note: You can unember community to counters ported to and executable suplication. The acty difference is that refer you tree the announced, if will arrest at a supertable WPE, which immers that you can run your application as a standard or you can deploy it to a LIEE-compliant contains. You are going to one a complete example in the following chapters.

#### The install Command

The install command a very container the grab combinent, the may difference of the reacount to specify the birety you want to made it and the difference in a little difference of the same as the difference on a little difference. The symmetrial manufacture in a little difference, by symmetrial manufacturing.

creating anitall [intins] ecceptisates)

The actual field agreement and

Option	Description
- autocontigury [knoleus] :lauspetti, -:p	Adds the sum-configuration compiler standard month (detects a way).  Adds the chargestic entries, which is contribution join himse thard party through the constant and party through the constant and the chargest a 112.7 bilder as the constant program and add all the charges of JADs there.
- ni- peta-dejewii Lei	Does not a transpir to grave the dependencies. Then is useful when you should not useful when you
nu-guess- legarts	Does not attempt to game the organic. This is mortal when you abready nations some at the imports, is your protect application. For example, in a large upply your common this opinion became you and among the classes only used. But more indicated has see Chapter 2 (the same configuration with the b.).

Title for example Limiting 8-41 speck agrainsy J. Franciscoccine in Entering command.

1 serving unitall drg.spockframework spilet-core 1.0 groups 1.4

You self have in the 125 item conycles years littery and its dependion ex-

Wote - If you are using the SCHMAN tool the profession only, if will insummed the location in the ENDED advance (conditions) by the begood 2.5 to NELEGIE 110 Minutery.

#### The uninstall Command

The armittall command of Command the dependencies him the life discount. In summer the following: againg websitall [againse] according to: The smalledde aptima see:

Option	Description
— untucenfigure [RecInum]	Adds (in )exto-configuration in a complete reconformation (definale is single-
-claspett, -cp	Adds dur chasparts suress, which is surfall edicatement have found party. [dm() is: As a recommunical (oir; ) our as [ carries a limit foliation): the mole (of some program and add all the classes or MHs there.
us-Bring-phonine (s)	Dominant administration to appear throughout the your applications. This is an efficiency you Alonally now the purpose to appear to a your application.
— m-gunn - imperi	Durit unit afterings to guess the improves. This is provide where stread mostly include source of the improve an joint grows application. Foil countrying lit is been appropriated use this equation for stitle you are importing the change you need from more information, see Congress Apple was configuration or more included.

2000 countries that communical between managethe following communical:

1. spring artestall argospickframewill republiques. Long-may-2.4

Divertifications will the Spock shaperators from the Lifetimerings.

## The init Command

The Diff community will help you must be a new perpect by among the Spring furnished help://start. spring.fm/) Whether we into you are monographed, the community will help you get correcting must be start a developing Spring Book applications. Its entire is the following:

apring into [options | [luminism]

The mouthable upnems age:

Option	Description
-a,artifactid	The project compliance d (c) and provided at the difficult matter is been.
hbuit sexcial	The Spring thair veriance me; if HV and provided a will get the lacest, defined to the general sport
—hisi3#";	The bridg system to nearby preside values or camer or gradie; 400°c out- aperation, the default value is recent
-dmpnomicies	A common separated for of digressioners alongthes that will be probated, bee example, a Feets or exhibit, jubic probability.
Miccinition	The project description
A Table	Overstreen Cast Oring Stee
— furnist	Administration the grammed minimal Charlet ships you would be support your property may as 100 like \$ 75. The provide private are but lift and project, that your proportion the default value is project.

Tommunation (S

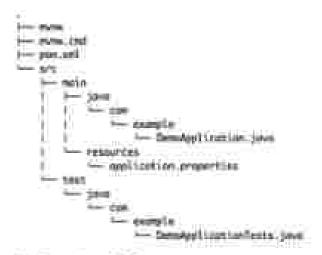
Option	Déscription
g, —griigefil	The purpose conditions defining the group Rt. Warmed provided, it definition can be well a
d jeo-kerilo	the triumings level. If a vision providest, it defaults in t. t.
-1, language	Appendict the programming to question. The possible colors are joint antigraces, transmit provided, it defined in joint.
F - + (1.00m)	The name of the application: This am provided, and thurse in them-
-t-hwysink	The propertion logging. The colors are juz, our continued by Mich are previded, would generate a 2-19 file.
- packmentand	The pockage some BU's one produced in defaults in more.
t <sub>a</sub> - typin	The project type. The values are execut-project, enters build, gradle-project, and gradle-build. If it's not provided is definable in seven-project.
-turnt	The URL of the second to the Arthrida in fitting //start.spring.to This country that you can combe just now released a series.
W waste	The project version, the are provided, it determines but, a SWPSET
	Define a fluctuation of the project control and because the current fluctuation in the $(a_{ij})$ and $(a_{ij})$

You self-up due companie very often (if you are not made at the STS or the fill), so you can get unid to to soft the following examples:

The country is defined project, year paint execute:

#### A spring is in

It will greature a liner, gap the You can unage a and take a high at the argument (a Maron proper) timestars), so choose it (figure 4-1, but the most outprotest part of the fire post and tile. If you hold at the fire content part of the fire post and appropriate that annual dependencies: apring-boot act actor and appring-boot act actor.



#### 50 directories, 4 files

Open 4-1. The Month on Continue

Figure 4.1 shows the man, rip structure. Take a took at the arm taken which contains the respectation of the following the structure of the first part of the following the structure of the first part of the fir

The can alongly execute the fallerency concurrent:

#### 1. Amous surring-boot rrun

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### init Examples

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The command will come the powers, the first began and add the -- had all parameters and decimal makingers. The construction project with the impression prophil and additionally, you need to use the renter, rig, and right properties trades.

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The first of the peckage made a non-specifical problems as an example. There were made a postupe connection, you would be add the a partiage positioners.

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This command will not require the 200 the make the and the recovery will be very some some current directory.

If proceed (colored and memory before account to our flat slope induction to corner parameter values, you make the field sering command.)

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### An Alternative to the init Command

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#### The shell Command

The the? I command will meet up embedded about the our the following command:

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& spring shell
Spring Woot (vilg.8,8(EEASS)
His Tab to complete, "Upper help" and but RETURN for help, and "exit" to quit.
&
```

As you can be from the shiper, you induly be being to get their independent in the chieft. As well a fer againg about 11 a the producer command in the construction or embeddent should the formula to that to have a 1200 completions to you can get all the possible congressions to the options.

### The help Command

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essing help
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  install [options] commitmates.
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  init [ignion] [inching]
    Institution a besigning toring Spring Initialize (start.upring.in)
  13/4/12
    Study a next at about
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See tending help ecommunity for more intermedian on a specific communi-
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As you and see bloggillas nothing and card also execute the surring fields occurred, which revery hands because you will get appropriate about the command and is some case cover examples on how to use.

A. For example, if you would be know whom the 1911 command, purpose use the following:

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# Summary

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the the parts of taping your are prong to Tearte Town to a many Spring applications and their company distritible by side with Spring Root squitzeroom.

#### CHAPTER 5



# Spring with Spring Boot

This chapter shows you less accord Appropriate for your field applications and according the NaSpring Shoot, It also there you have in use legacy Spring and with your Spring Burn applications.

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# Spring Web Applications

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# J2EE Web Applications

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### 5 directories, 3 files

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Figure 5.1: district you she proof of the small the enter concurrent Lev's smaller widting a missing dependency of the pers, exit. Listing 5.3 shows got the final pers, and

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# Spring MVC Applications

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Nest, take a freek at the Spring configuration above in Linius 2-4.

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### Spring Boot Web Applications

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#### 15 directories, 8 files

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# Using Spring with Spring Boot

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### XML with Spring Boot

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### Groovy Beans in Spring Boot

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### Standalone Spring Apps vs. Spring Boot Apps

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# Using Spring Technologies in Spring Boot

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# Summary

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### CHAPTER 6

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# Testing with Spring Boot

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## Testing Spring Boot

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## Web Testing

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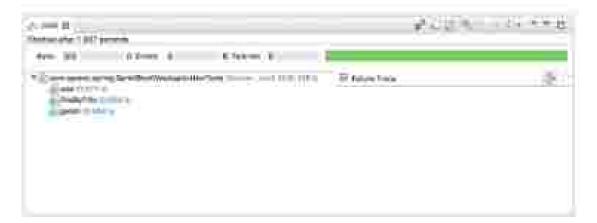
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#### DIRPTED # TESTING WITH SERVICE BOOK!



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# Summary

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### CHAPTER 7



# Data Access with Spring Boot

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The chapmer covers data are assoned with Spring front along the supple application front Chapmer 3—the Spring Bent formula pipe. Sent are groung to unable this simple appropriate with SQL and blockQC databases. From the Joseph Apply your are groung to one and the number —melling about the such, proceeding. Let's get shared.

### SQL Databases

Do you remember these days whose (to the law world) you resided to deal and, all the DDC (1906 Darchase Connection) to halo Year had to developed the correct drawn and connections strongs, open and clone connections, SQL statements, result area, and transactions, and connections benefit are so objects. In the opinion, there we all very trained tooks. There is of ORM (Object Relational Mapping) frameworks stated or ninetype to making these tasks. Include the Carrier XML, Object Siter, and Objects is not include a few. They allowed you to observe the down a leases and come XML that was related to the database to take. At some point you also mented in he database to take a point on also mented in he database to take you know a law mented in he database to take your point on also mented in he database to take your point on also mented in he database to take your point on also mented in he database.

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# Volum Gorantia 2018 | 121

### Data Access Using the JDBC Template with Spring Boot

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his of by which may the Spring Boot CLI and integrine by U. susmound:

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  executing tasks applied the detailment. This permutate class is besenful the tripical of
  design pattern that it mentioned that allows depringers to them only on the data and
  leave all the data have tasks proved, deliver, etc.) to the templant. Show it have a factor to
  it in hour to connect to be absorbed chords.
- invertibits. The morned soft into my so dains a loweral value of 0 equal, than y will
  young the Journal tobbe sight to fletch and, hardly, it will morn the data into the
  database All these automativities through the jobs longitate automate by esertioning
  in mortland execute (the exercise mothed accords the SQL query square).
- FindALL This method will use the Jube Template mature and the query method (that accepts a VOL sympa) in per all the data; it will return a collection of Journal metancies.
- Engges: A feet normalism that prints must what is groung out at the method calls.

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    log.info("## frankill() call...");
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- It desires the auto-wired unions of the Internaliserative studing recoglishle wires, the proportion executes
- It implements the Coverasit instances marries, and of course you would be implement to method in well, willed public wold you (Vering, ... edgs.) has attention that the ten method will be executed about the Spring Boreline started. This is a good place to call the Journal Service incommand execute for days morning and to call the FireMill method.
- The Logger big modern points out which is going at in the execution of the class.

To morthe applicament assumes the following transmind:

#### 1. James was tog Best 1999.

This constraint (if the applicing the Algorithm opportunity) comes with the spring lumining 3 (one).

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≰ ими прилид-соотлини.

Hence If you are sing the Miners scrapping in any command and you are getting the following error—
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of the Miners enables or perturbility as a year world to send your code to semitted, post more some in motion the
latter and its contest. That way, that purpos doesn't used to house the contest. That way, that year, the purpose of the Miners.

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As you can over hearthis compar, the uppels comming the table, meeting the data, and thus (inding off the stem persisted min the character. But hear? You didn't provident startmen engine as committing to persist the data study and table 1 amore our Database or as all very URL string concentrates. Removables that this sample apply using the 100 to attempt database. The engir happens within Spring block the all related or transportations the database, the content of the database, like a transportation, approximately the database, the property over block, and framewhere from 10 con now the present the database, like content to the database, like a matter of the database and the characteristic database. The characteristic database are matter in the characteristic database before the characteristic database.

Distriction that everything out to such the constraint provided by the #SpringhostApplic at immonrance), it will describe that you have a Fizen connect that have dependency and it will exceed the right journal Distriction. This means that by including will have the erg. As District depose that, which is the excitation OUL as jdin its intent to the and the overstone. It is suit present a suit pressured in improve that a state of the thirt output.

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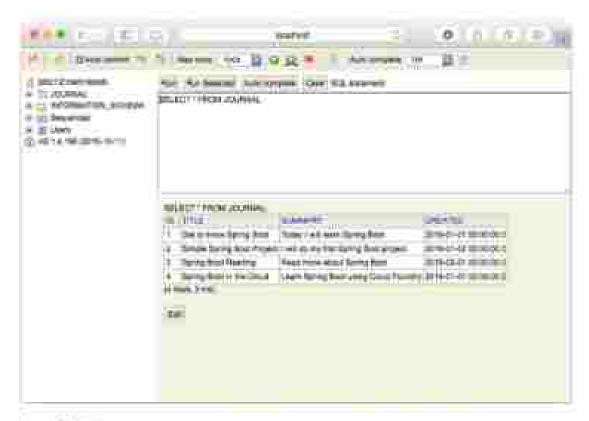
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Pignery 7-3. HDC-minlement

Figure 7.3 shows you the query result—off the date than the epplication. The H2 processory distillate to a very good option for among applications that most a personnel among a policy to entire the among applications.

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### Data Access Using JPA with Spring Boot

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Listing 7-7 shows the Journal. Jack sizes where its pring the jount, just prince package choice and interferent intrinsical points of the principal partitions. All these exploidable being in the pro-question and are going to be used to demonstrate ourse (the class exploid with pirtary anadomous) that will be marged on a table 1 to the class to a literary of table ) and to be interfered to a table 1 to the class to a literary of table ) and to be being fall persons lieble with severe and principal to the contraction with the first and principal to the contraction of the first and principal to be interfered to the first partition of the first principal table.

In the large of the Journal table.

Next let's see the service: powers still going to use a service this; will insert than and first all the data in: the database. See Lipting 7.8.

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          rytics resultings (SHEKITE);
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Limping 7-9 silicons your transcersors proposed for using an independent or management of the confect

- (Service: The automorphism matter the class as a enterpy of the will be remained as a limit by the bitting continuous to exact be used, for example, with the part awards accounter.
- Description of any distance is being dues wheal, that where is that
   Toward Repeat Pearly districted their resulty, you are group to see it in the seek
   regarder. For now, you need to chant of a salar normals that has the knowledge of
   from the set, the data. There commenting to the districte, to accommit at fer an assign.
- InvertSate. This mothed will meet the data must this families. Note that drops
  who database is table recommers excepting sell to done by the observance of the
  luminal types it to re.
- Tissuell. This meritant will call the Issistic Propertiery installed to get all the data from the database, continuing a last of Journal Instances.

Next, let's sen the Journal Higgs Hugy interface. See Living 7.0.

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Living T-W shows your the Instruction processing, further, further, figures. The Instructions through the positions and increases a further shows by the first the process of the first process of the first process of the first process of the first process. The form of the first process of the first proc

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The highing Printers on and in more case the spin ingle data is submidging will be an change of consumg digments produce that will inspire our filters and being you. This is because all files or minds servery grant to and regetates, so you that a law is implement them, you can let the use legisless that it is a your health.

From Seris habe a look at the promotyphic atoms. See Linking 7-11.

Listing T. LL. not remain. Jame's non-agreement prompt Complete adapted productions personal

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       31
```

Listing 7-13 above you the to-tropping sport the Staple I purpose list action, just these Larra expenses to make:

- EnringSectApplication. This is no was a unique universally regression autoconfiguration and will obtainly that you are using the opining-book exterior wintergas. It will treat your equilibration as a APA app. 25 to (Lubic about) they you have declared the ICO princement of the APA above and the payer, vg3. Databases in term. It will be replicated with the ICO above and use the terrain database with the declarity content of the content of the ICO above.
- Attact. This is included as a few and and real principle Contained, the horsest
  precision. This is another may so left the dynamy Board app to you this specified after
  the Spring application is started, in this example of a using the Jave Beauties to
  return a harded a whole of a using the Sintral Electrical parameter is the a tary medical's
  parameter of the outers the data and show only the familial mention of green of the stary
  through the demonstrate.

The part he see that you don't be set to write any under the commission dutching tests—line to highline, sind delien our covered—that what happens if you need to perform a very particular that higher the our seed to find the intermediate that what he procedured to the commission of the covered that what is come a commission of the covered procedured.

By commoding no the 2pakepoint ray, non-constructed spaces another among the following a property community convenients. This provides exeminately to the beliapper of the chies, so the exempte, which the Journal I, providing a continuous the title property, so they want to that all the takes that continuous the wood. Spring, you can write a method like that:

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mindle that observable finally bit below thriving String word);
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This method will be to asked to the SQL overy select # from DORMs, where fithe like 1941.
Where the Proportioner will be the word Spring, to remodel be suspending the time.

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What if you need to back for all the pourse of the retrieval in a property is not as cause a method like second in the local factors.

This minimal infills considered to the SQL query and for a firm indexed, where are not be. Yet Very now that the Antifered to the a particular specific specific, you can smoke the. The Research and the last and explained and equipments of equipments like this.

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```

As you can see, you have many byman, See Living \* 11, which is a unstitled extern of Internal appointment, days.

Taking 7-12. Minimal Version of structum/jew/terms/aprils/aprils/improducty/informal/apriling product processing states.

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They for the room of the clusterally as create the database and inservation. They former is contail where you have
a disciple form and noise (initialize the strandard by interest of congra or size to these thirdnes, you can see that, sell and require the inserval as in the create sell from any involve. See Large 7-11.

### Linning 7-Th. archman resonance/dim.od

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DRING 10:00 DOWNAL (retir, nomercy, remains) VALUES; Spring Boot feeding', 'Easin Spring Boot wring Chool Feeding', '2016-02-01 00:00:00.00');
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Lighting 7: 13 shows the SQL and remove that yell for districted by Spring Black Serie year on response Install Data have visited Decreasing the Asia as the condition the same effect.

III Mights: If you would be seen the SQL abutaneous that the JPA-Habarman angine is assessfully, you not use the Milloung property in the sections (consider any application) property in the sections (consider any application).

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### NoSQL Databases

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The section covers the Mangel IE, a SinSQL deciment database. You are going to not the personnprocess application, but be fine you start, you need to waste some that you have the Mangel III recent postalled on your container.

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Witness Level

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        unlier.upnemed(grtf.snatnuksShortf));
        m_{i}^{*} = \operatorname{approx}((1)^{r});
        return wedne tootrared):
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Littles 7. 13 shows you the Imperal, broat the Lat's revide it.

- This time (come) for any opering frustments, state, amount of inc. School the reg., appring frustments, state, amount the . To another community, which are defined from the jeven, ment is true, a parking of the common they training to the JAVAS pecials around they allow you no have surprised by your one fitted and the property would be proviously the distancements) and the property would be proviously in the distancement.
- Another important difference is the III. In the precious ends; it was a Congress, but needs a Stategy which is inquired by the Mangath III. The max was a make another the mark with in gates and setters.

Next, let's take a limit at the ext/wath/(sext/con/agrees s/spring/rigonition)/Introductions.

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Langing 7-19 Alarmogene the Invariable govitancy. January in continue Locate review it:

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   Stains
- Again, because you are saming the spring-tata and spring-tora-composit
  abution from your case have "specif" methods. In this example it will find a till
  that produce a west. The "quees" exclude finally fitter the will be translated to
  Monard O queer system benefiting the dr. yournal. Find(("title"1 /\_"bit"))
  execution.

New deck hole a fresh at the train applications from historic 2-17.

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imput com.aprens.apring.domain.Normal;
imput com.aprens.apring.domain.Normal;
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dispringFortApplication
public class SimpleMakhynApplication (
    prosude atomic final Logues log = LoguesFortery.getLoguesClumpleManguAppApplication.
    class);

public static word emin(Stringf1 args) }
    SpringApplication.com(SimpleManguAppApplication.class, args);
```

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      Considultive United Start Classification (there remail)
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                      1906 Levelyow Discreal Course Sent to the Cloud", "Spring Sent using
                      Casual Festiday", "63/101/2010"] ]
        log. infor > Getting all data . . " :
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        Joe infol's Getting date using Libe ... ");
        repo.find@fitleiske "Class").forkach[entry -+ lag.into(entry.toString()));
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Litting 1: 47 shows you thin make application. Does that applieds bundary to a nor distribution from the province. Unless the control of the called about the Spring Boor application is substanted about the Spring Boor application is substanted about the Spring Boor application is substanted about the Spring Boor application.

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#### 1. Amous surring-inerticins

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exist-macedity, "sammary" - "I will so my first Spring Foot Project"
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Immusit, 'hitle' : "Myring Book Reading", "created" : Thioben("1916-02-01fa)(m)(BD)),
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## Summary

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### CHAPTER 8



# Web Development with Spring Boot

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This if appear choice in the control of prome Records is proposed in the New Jorna absence increase, with some resultables in earlier chapters, what you can do with the Well. You because that Spring Billet makes it appears to a rest seed uppeared a feet burst of train and that you are do want about configuration. He many forms and increase in a deplete your webs application. He many Spring Bost and in a state semily states, you can have an embedded application weren the Torsey or belts, which makes some apprecial delightening and provided and permits and apprecial delightening and permits.

# Spring MVC

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The appring selectable has been red integrants become such as managers for appeal functionable, and affection of the Spring contained by using service because), and a selectable opporation contest. The spring-net module (ska, the selectable) repulses affects Spring MCC for idea View Controller) and fifth services mathematical managers are found from These resolutes provide mean from an and as very proceeding by significant process. The services are found from the model of the module process and as very proceeding the process of the model of the

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# YOUNG STORMETTS 2018

# Spring Boot Web Applications

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Let's start by configuring the 35 NQL properties in the application. Not only upon and wise has been placed as a part of a properties.

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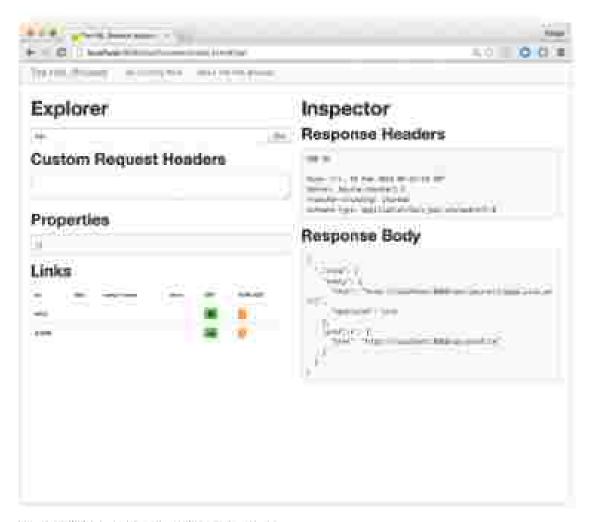


Figure-B-S: http://lies/figut:2000/api/Orients

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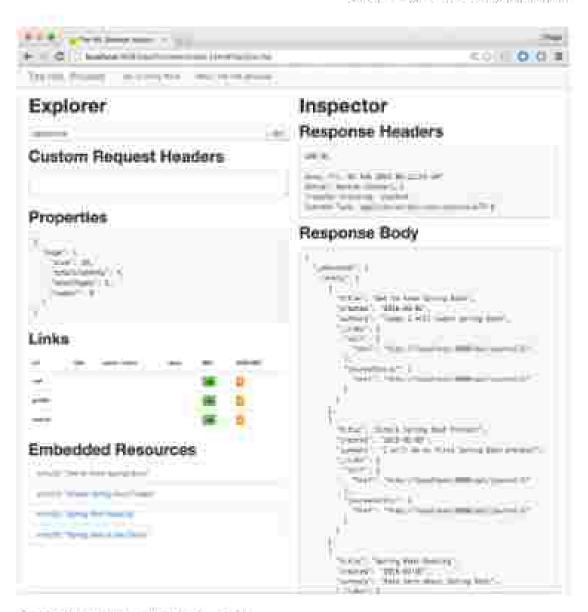


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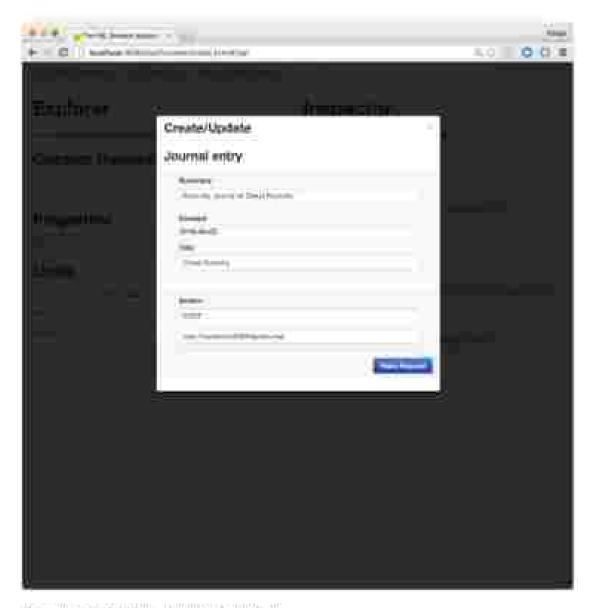


Figure 8-7. ACM/LEF action recommend entry from

Figure #1.7 allows; your the prompal entry forms, we you comete, and have options. Excl. line to office the links and go bear to your boson and so all the data. Now would Vois control a Spring Dust with application with a water App.

# Summary

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### CHAPTER 9



# Security with Spring Boot

The chapter shows you less in one are string in your Spring Book applications in order to sective your well application. You leave every thing for training books security, we strong O.A.m. According has become a primary and important form for deather, such and resolute applications in the last decade. But security is a finite final to implement become two investigations recruiting a roots also scriping anchorization, and nothing to the complication in a soft a lot to do pass in very leavest surprise security to your applications.

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# Simple Security for Spring Boot

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Figure 9-2. Best security authoritistics on being 17 perthout 1960.

Figure 0.2 shows the times occurring whiches, and of control the fields are group and entire to the beginning. Fee part plot the entire control will seem to enter by definally, the Arthurst in at Lordanages operation in an enterprise property of the source of the part of the source of the source

That's (if That's the contest and most busis security your and for your serior processes, and the only thing you did not sold the spring-boot exterior security your. When the spring most approximate, the university profession will identify that you have the web and the security dependencies and a you conside the beautering authorization. Of course, this is not key to elither the production appear.

### Security Using the application properties File

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apring_diffuserrater = jebc report://lacalment:3304/journal
apring_diffuserrate.commune = apringhent
apring_difuserrate.pustwerf = apringhent
apring_difuserrate.testablicable = frue
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apring_jpa_show-rat = true
apring_jpa_show-rate.testable = cruste-ducy
apring_jpa_properties.hibbrroute.dialect = org_hiberroute.cfg_logroupedWarderi
apring_jpa_properties.hibbrroute.dialect = org_hiberroute.dialect.testap.

# Security
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security.org_puserrate = issuerame
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Living S. Johnson the application, properties this and all the section. As the very soil of the like action section, somewhat you was a few actions where you can specify the storescine and promotified the basic and expension. Now if you can the sound against the sections.

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$ Jeans spring histories;
```

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% insl =1 http://springbootrisamesosmilecedimestoRde/and
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X-Rid-PrinterLime: I; rese-block
Coule-Couteol: no-marke, no store, non-auc-O, must revalidate
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SHOPTED A THE SHIPT OF CHIMAN FOUND
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```
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factors to
a-forme Options: DUNY
thrist-Transport-Security: ens-age-31500000; include/actionation
factors-Type: application/halageou; therefore
from for-foresting: shankon
hors: Set, OO Fie 2016 23:80:23 (M)

"linhs" : (
    "entry" : (
    "hert" : "http://blocallost-8000/agi/postnal('page, size, set)'",
    "hert" : "http://bocallost-8000/agi/postnal('page, size, set)'",
    "hert" : "http://bocallost-8000/agi/postnal('page, size, set)'",
    "hert' : "http://bocallost-8000/agi/postle"
```

Using this communit, you can see that persong the account paraset if grows you seems to the BEST APP. You are stopy our application now.

### In-Memory Security

HC.

though the application.grouperties the units multahomes, let's be how you can use our manney security. You are group to notice a process main! parademispress crapsing/contag/. InterneySecurityConfiguration(tawa 00, so shows on) atom 9-3.

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              ##1-1 (*1842**)
                                 and sithiver ("news") newsort ("newsort").
                               resident "ISTE", "MODIFY):
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- #Cart figures (i.e., The automation offer the Spring from the mes of a period the configuration), it is conducted (i.e., XML) files.
- Win in England England treetized. The appointment number the character and condigues
  (d) the necessary femals is a proximally secretary so the application. It appoints
  that the automated class can be used to configure a plobal treetize of the
  England England Engagement of these.
- particle of the figure label attentication was quite atth.

  This operand is called to a one-wise the dethernication through the Like. The

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  althougher for a laber vice and the inchange and provides. You are prought beautioned about the operand is the following section. In this case, is sell use in examing

  because his colling the total reserving to a transfer or the first and the following section and setting up the common with their proportions and refer.

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Wertrichte ausgeprachen der der der der
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New years name you thin process a approximable

#### 1. Itemie springthootinus

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## Security Using a Database

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You can using MySQL as a dambane engine on let's countries using that Trest you are group to create a security emoligration. One or the recental flavorage as Appring contag. Sale Security Contigue at Loss, parallels for things 9-4.

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  the proposery become acquain the second on the angle area.
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Decaywe this is a fDBC snowny, you need to add the white woll to their with the set. Furth (resources / scheme, sql like Here to will be the table while decay place and for the synfactor rest (600 a. sql. See Language 6.2 and 6.5.

### Disting B. R. American Section 1. S. Hymnath

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LD STREAM;
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CHEATE THREE SHITTY:
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CHEATER THREE SHITTY:
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TITLE WARCHAR(253) SHIMLET MULL.
PRINCES KEY (13)
```

Larging 5-3 shows the achieve, p.g.l. which commute the invadability account table for the actions. This middle is an admiring and is an adaptation intensity Spring Security discussions: https://docs.spring. informing-security/site/show/dustrest/reference/discl/appoints-subject. Also include that the pour all table on try or defined, because when your crown trees, but the propert trusting, just like and all auto - cross street in the south of the south of the resembly contact.

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### Disting S. H. Andreadh Commission (their sail)

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first Spring Noot project', 'Jour-04-09 00:00:00.00');

INSERT INTO ENTRY[title, interry, treated) VALUES['Siring Sout Reading', Bead were about

Upring Root', '2016-09:09 00:00:00.00');

INSERT INTO ENTRY[title, interry, treated) VALUES['Spring Sout Reading', Tend were about

Upring Root', '2016-09:09 00:00:00.00');
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Liming 6.4-forms data, 241. For real add the new account twens and the purmed data is the file.

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#### Enforme appring Southern

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### Securing Resources

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import org.springframework.sprincity.comfig.accutation.acthectication.configuration;
import org.springframework.com/urity.loodig.accutation.act.builders.fftpScruity;
import org.springframework.com/urity.comfig.accutation.act.builders.fftpScruity;
import org.springframework.com/urity.comfig.accutation.acc.builders.fftpintion.
WebboconityConfiguration.
```

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#Configuration
#Configuration(Astimuticution)
public class #economics #Configuration extends web-configuration extends web-configuration
#Configuration
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Limmag # Triffcom the ResourceSecurityConfriguration at in. Latin resource

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  personATT() and and receive the endpoint /aps with \_art first chers(\*\*"),
  authors is a feel() will by disking this receiving as MttpNacinteen (\*\*").

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#### 1. James spring Boot true

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Figure 9-3 dissessible model of accompany the fitty: 5/1 et allocat (2010/2011, letw f) redirect in the samp; / Fice allocat (2010/2011) for page. After you provide the conserver, edeands. It will redirect to the URL year were limiting for which of fitty: 5/10c allocat (2010/2011) for a me one work and editional. So you can use, who say you are sufficient. Now you can use any year and a fugure form. Now you can use application.

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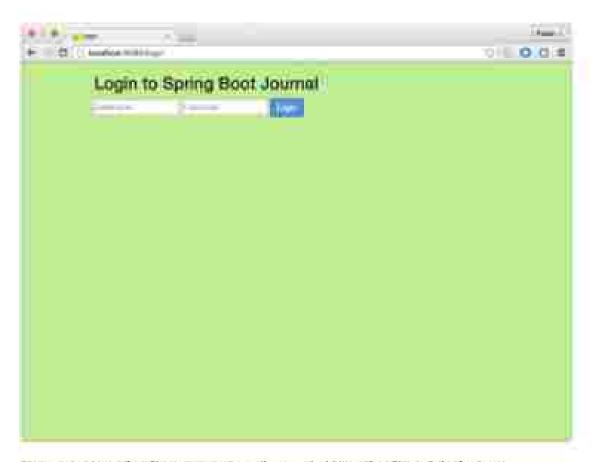
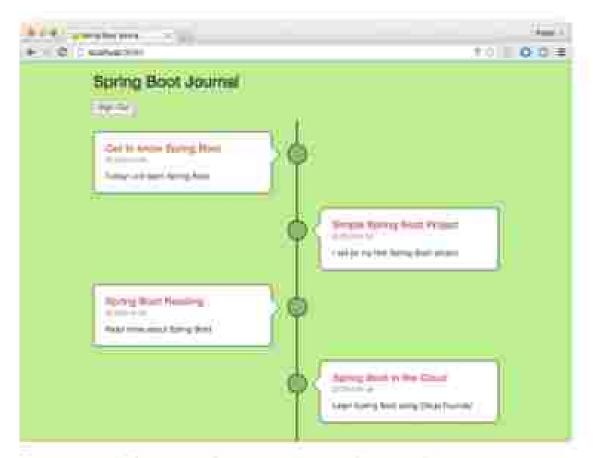


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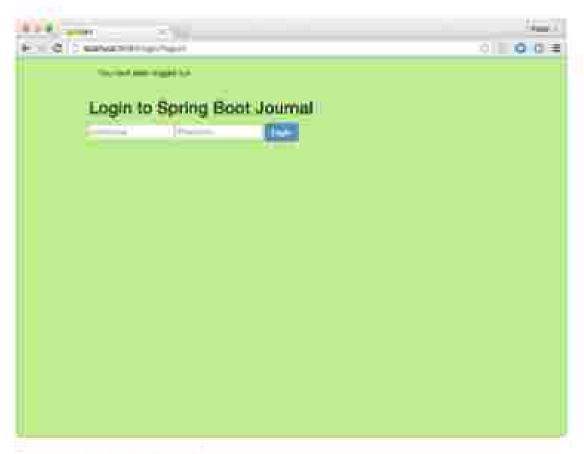


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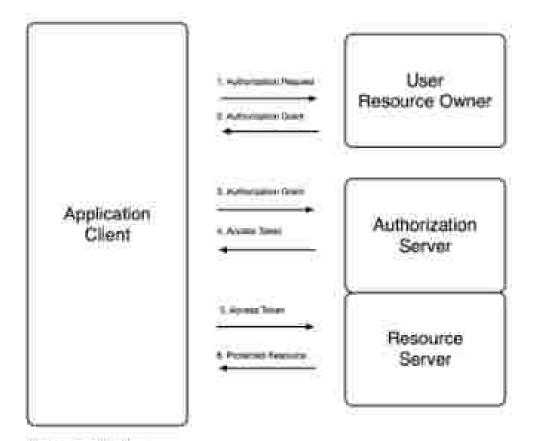


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# Summary

This chapter showed you know you can an enterprint your web appril to me auraple 11 FP or using an imposers until 1000. It also showed you know to implement OAxidi and majorition. As you can see, adding serving) is more simples than ever. While it we aminorably you can return your applications with more, I have should have been proved to you were more provided in the facility of the the facility of

The following character discusses meaning of the home too):

## CHAPTER 10



# Messaging with Spring Boot

This chapme is all about immarging to explain, with examples. New in our Demert) in complainmenting the PACL (layor blessage Service), Rabinobbly his population may AM()PI (Advanced Message (Discuss) Proposal), demarks for Park/Salt, and Wobbi-school for produce many STOMP (Sample or Secretaring Text Original Message Protocol) with Spring Book

# What Is Messaging?

Messaging is a very of emploration tring because it on its native attribute and it is expressible in

Company messaging at two forms manefort his been examinative & Se increment of the computer, and as a method of committee maneform handware and/or entropies complements on applications. There is also be a confirmal or or other entropies. Messaging can be sport to make and expect from the post of peer to peer

From all of this, we can say for around that the suggest problets do uphased a noncommunities from the formally another the complete, minimizing that it dones? Since the construction are what are suggested and the political right of the construction of the desired without taking the sender.

Of course, there is a forme could say about pressaging through said socialities and including as to new protection and messaging partition, from the parameter of this abopter is to seek with examples that illustrate him from the facilities and pressure of the parameter of the p

With this isomial, 10% unit contrag some examples originates of the reclaiming test and non-capterioris starthers.

# JMS with Spring Boot

Let's users by using SAPS (lyne blessings begins). This is an old her has may that as will being used by some imagenates that have begins; applications. (Ed.S. was consisted by that Management or remote a way in send interest; a synchronously and argue horizontally and a defines interest that one if so his production and by transaction has been applicable as Web-Lagar, 1958 MO, Activities (Alaman), and

Debta a large cult including, and never at their large bern some attriuped to communicate, bridges to communicate programming large ages. Such its difficulties on easy expensive to some different performance. I know that you are through their this is not true, because non-common tension magnified.

Google Positionizes, Apoche Christ, seed and their reclaiming to a hierarchy to DDC this is soft a but at work, because you need to know and magnified make their discussions.

Lee's start by casoning an example strong MMS some Sprong Name. The Spring Robot maps has a Magnest, started parts exclidible, so that'r, the one grower groups, to side, through G is an open entered exambination processing project than Diseas.

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ment of problems having 100 h.
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    private clair final lagger log = toggerfactory.getlagger[Finations.discs];
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- Minor a Default Message is tweethout derings a house that said Heron & Default Message is tweethout about minors. The Heron & Message is takened out about mostly the case at two Factory. The destination function — application is and the exception as will be reproduced as ease at the Case word. The Set on 17 Message is taken of message is tree a Markov for the commenting to the apone and his prong through the commenter's Message is tends when it is proved to the apone.
- Walter querie. The #Walter appropriate with least mile the application jurgers the
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## A Simpler IMS Consumer

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   \*\*E(eyethersalese:)\* (spring)count, but take a limit at the mention a legiler Consiser:
   Union has a mean type: a string, which will alless plent to us small the revenings to the destination.

This servation when their when you process your ensurge still their need to have a repliquence. New, if you can the application, you about have the following unique:

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heringBoot Books | and Spring Personsing test
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Now you know that they are cook needs to do consume with approach of managing and Spring Bires.

ŀ

## Connect to Remote IMS Server

Now you know have to write a Spignar Brain (Mr. applications). However, any analyte examples which you are under a security backet however, but you can also use a security backet. You sumply pool to change the application properties. For example

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# RabbitMQ with Spring Boot

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## Installing RabbitMQ

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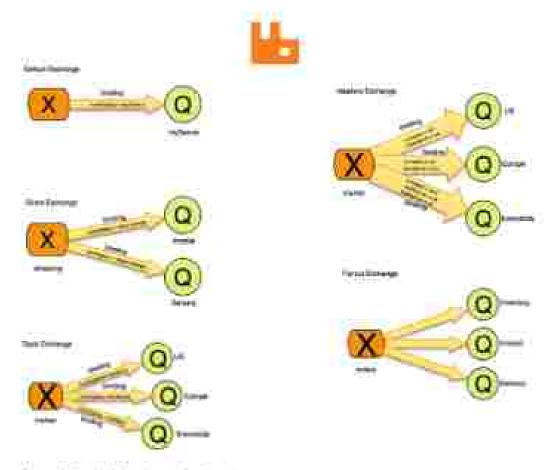
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## RabbitMQ/AMQP: Exchanges, Bindings, and Queues

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The AMPQ pure colliderates from exchange types: Dones, Familie, Toyon, and Montes. Figure 5th's shares more differences from topes.



Pigner 10.1. Ald West Services Surger quarter

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- \* \*Comparent This immonium maria the sizes to be puriod up by the Spring containes.
- Whetenered Kainettlesplate. The fallest Semilate is a heliconstant that symplifies
  rendring meaning account falliantity for sending and more lengthese messages. This is very
  souther to the Semi-explain portions earlier.
- rendforcestingley, we sugged. The method has as parameters the principal for and the principal in this case the solutinglery will be the principal the querie. This method is a using the amplet template presence to call the convert Andiend unished that accepts the ranging key and the message. Tomorrans that the resempt will be read to the methods of the methods of the rendered by the rendered that the rendered the methods of the methods of the methods of the methods.

Nest, the Composer stars to dissource Library 39-12.

Listing On to remain the account speed appropriate the continues of a second continues of a suppression of a superson of a supe

Limited 16. Library the Committee Spreadown (Let's examinal to-

- IComparison 5. You indicately know what consistency. If well man's the above of he product up by the Heritage consistency.
- Making Licenser, The american soft mark decided (Nexamorped carries the
  connection (is a three or well) for rearing a bonder income process processes;
  it making that it is the mineral forces that is obtained by the total of \$100 a quarte wild
  and pass that are some to the method, the high the series, the bonder will be in test
  an observe the assumpt to the appropriate type to among the right message converter
  (but implicit a ration of the org. variety framework, maps, imposit, constitler).

As permutationed from the Producer and Considered also code to executable, if you created the by only using the habitable have clear (bitter 1/1 and code) and produced the street in the bitter habitable has been been as the street in the st

For this project, you will this depend on the say feath free matter (application, project les file and a monator may use the

#### Pulselini - the law-bunt

That's the surror of the queue that you are pringer by mingen it almost \$1. Since for side a look at the amount application. See Lectury 10.13.

Пимод 20-13. - нестрыко-раск/сополнують "култаштерновай не быйтогов Аррби и больцоск

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- We like Strong. You are installed with this accuration, it will provide united from the specific at the property int.
- When Duese. This will note make a high of type the person with the make provided by the closure on its (apping boost 130 Quests show as the construction accepts the nation of the quoter and d that quiese will be distrible or not to a more responsible of manifolds of particular poor more than a provided and the grade.
- Allow Compatel And arrest You are also facilities with this announcement and what it
  minutes the fill the executive After all the contiguous in draw to appropriate and
  as parameters on the minightim Possioner (continue (last reals) the area for mention) that
  accurate the interest that appears as the continuation (last realist the intering). (Encounter that
  the Fernica et alone is appearance with the Margament announces, so that a where a case
  is an opposed as a parameter through the allower accuration.)

Memorator that in the ANDO permondant word an outlining that is because a special so a special section of the particular assignable will come as amount a present amount spring-book, and to default all the springs has bound to a default exchange. That's with your data's procedure any softeneous about a cachange to, which the produce sends the second street and be seen to the default exchange then invest by the spring that it.

ficition you may your enamyle, make sure your that the sures is up and manning. This can mare it by opening a servine panel and renormal the following constraint.

### I ratifiting served:

```
Rathinfold 3.6.5. Copyright (6) 2007-2045 Finetal Software, Inc.
on at itemated botto the MFL. See http://www.ruhniteg.com/
as at
nonnament logs: /ner/local/ser/log/rathinteg/cobbits/fee/feet.log
nonnament at
//ort/local/ser/log/rathinteg/cobbits/local/ser/log
nonnament
Starting busines... completed with 12 pluging.
```

This magnet shows the matrices Q server with 12 pillages manifest. I from the metation that preventions the Matrices Q server density or one up to 10 few sub-considering manager maladist, so you ment to stack be judy sometiment to stack be judy sometiment to stack be judy sometiment to stack be judy.

#### \$ notificing-playing models additing paragreen.

This will enable the such countries of special port 25622. You miss go to programme as the straight and another side and a sufficient special transfer and presented. The straight confounds are given to present a four about the same the same analysis of Vignia 1902.



Figure 16-2 Birth St. Common Common St. Common Comm

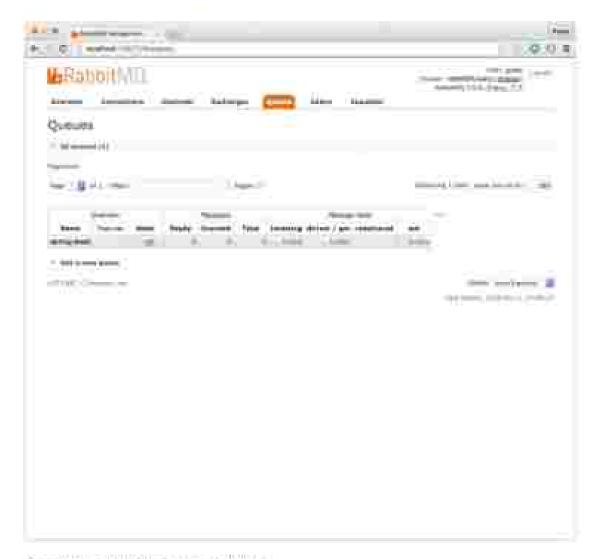
Figure 10-2 domes the BalliniMD was versions Now you can then the project as untital

## \$ ./mm/ apring-boot run.

After your operate this concentrall, your should have sold thing sinists to the following obeyon:

```
TANG MODEL --- | main] com. approxi. spring. robbiting. Frances : Sendings ...
TANG MODEL — [clashissource: ] com. aproxi. spring. robbits. (Sender: ) Communers (Mills Section)
```

Hyportake a love at the flattinist Q west conserve in the Queens talk, you should have defined the appring boot curies that flatting in 2.



Plymer 18-6. Reliability (Line) and the Opinion half

Figure 18-2 shapes the Charges into from the Batchild Queets compute. The message was pind and was deducted tight away. If you was to play a Britis move and see some part of the throughput, you can modifie the many appears those in Laming 22-15, but don't begin to stop anneapping pressing Codet.

TEMOR 28-15. Amount 2 of sext training the Acousting point (prompt spring) Through so the following Spring than 10 and 10

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```

Length 28-14 shows a modified version of the frain app. Let's common the new recom-

pExableScheduling. The communicated will eta a new configurations the
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the portfolds construct with extractions in the abouted by a ring, and ingitive examination
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The other pass of the approve already times. As if you ever me the project opins, you should see earlies, measuring while this is remarked a lock at me Mathiable considerable and one the mapper. You can put a fur loop by send your upon the mapper to a fulfall a second.

## Remote RubbitMQ

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Additionally and the Equing AMQP technology, some our get broom mile at the error projects well one written.

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This can imp Rabbuthly by present Carbot you must the Implex. There are more agrees on his or me Bairbuthly, like conting a charge or has ing high resultation. You can find more anomaly make making the arbitrary bear continue. Cont.

# Redis Messaging with Spring Boot

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## Installing Redis

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```

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Next, let's her the Paninicky and Consumer, New Littings 18, 39 paid 18, 12

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Limited 18-10 illiency the Producer's type Clinic Law's entending the

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- \$60 to \$10 to \$10
- Actual For Their mentional Armatics at mentions strong the interprise of content to the converted of their participants.

According to the property of t

Alathing 18-17. Am tracing and county press laying perhal Companion levil.

```
package com apreci, quring, restle;

import org. v1fej, Lugger;
import org. v1fej, Lugger;
import org. v1fej, Lugger;
import org. v1fej, Lugger;
import org. v1fej independent, sterootype, imporent;

#Component
public olima Communent;

private vinter final lugger lig < Lugger;

public vinter final lugger lig < Lugger;

public vinter final lugger;

ing. ih fo("Communent) (" = merrage");

}
```

Licing IP 37 show you for Directors. Jacob Class The class say was the Warphorst amountains, which i you already three. For this project, you will preduce the server in project out fund for the project institute. The wide as community.

```
family-spring-root:
```

The appling-boot value will be used in the inflamma the Alexa bit's see the configuration. In a need to commercial before an above in Leiting 10-16.

Dating 10 tal, entriests (seatment speed appropriately Bridge Certification

```
micking communicativistical config.
Lamit' and opting therework, beans, factory, annutation, while-
insure org. springfraeewerk.contest.aunitation.Desc.
Immut and springfineweaking text and taking Configuration;
import mig. suringframework.dutu.grdia.connection.KediaConnectionSurtury,
Separations are approaghorments data seeds Sixtener Pathern Posts
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                         MessageListemenhamter (listamesAdapter) [
```

Listing 65-18 sitesys the Cours Car Fig. (and class to make to connect to Rudal, you among how delibered a Redis Personal interestant name of an old comment to Rudal and some other to a character or reporting a flesh and some Adapter. Let's comment to also also

- Mean Temin\*errages interestant agent. The continue of each experimental of the other immage (continues (Sept. Railes)). This continue of each a Context is Fartury or personnel of Perts Compact and Sectory) have done the details inches policy and purpose the application, properties—core about this boot. To be mouth a Meaning to residuation and other and on the other and the observation of the interestable of th
- Mean Accompetitate exchanges, This mechanise remains a new Sensing of the text Admit set that is the (decorate or have for each last Competer than a new posterior) and the (Competer transmitted) unifor the sensition been transmitted from the presumption of the deletion of the competition of the sensition.

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Next, let's her the south Application. See Lighting 19, 19.

Linker 16-19. strimming year more spread apring Spring Confederate Application per-

```
inext mag.springframework.boses.fuctory.annotation.Value;
import org.springframework.boset.Commanutionefluence;
import org.springframework.boset.Springfpplication;
import org.springframework.boset.witzcomffgure.Springfort.Springfort.inn;
import org.springframework.context.annotation.Domes;
```

Kanping Ht. 26 shows the risits approve the Abriefly familian with everything here.

Deber journey the project make one you have the finite server up and running. In most it execute the inhibitioning command to a terminal:

```
% reflactores
#9##7;C or Neb 20:17(55.)20 # Manning: we config fully assocition, during the definit config.
In error to appealing a special full man series record aparth/to/sedis.com/
#5887;M or feb 20:17:55,321 * Introduct appining punker of more false to 20032 (it was
reignally out to 256).
```



```
System is Feb 20:17:55,725 & Accord started, Bedis wersion 5.0.7
$3881:M In Feb 20:17:55,378 " The sensor is now heady to occupt communicate on part 8379
```

The compute policies is the Desile to make and Determination the point \$379. Jone your time the projection to the projection.

```
1. James spring Bootsmin
```

After remarking this command, you should have they unless remembing tander to the hallowing common

```
INTO 99232 --- [main] com.upress.spring.redix.Prodess: : Southage ...
INTO 99232 --- [c-2] com.upress.spring.redix.Communer : Enumers Spring South Each wells servinging!
```

Well donet this have consted a highling Bothism-signing approach; Wells- this one shouthean Bothis by the sing Colet.).

## Remote Redis

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spring.codic.gon'secutopustapustapust
aprong.codic.dou't=6679
```

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\*pring.in/apring-book/complement/referrock/bbbl/comma\_application\_properties; bbbl.

You are what you wink a limit of a considering to the first it per many in himse appendent to the large and a limit the large substance with the first of the first of the first of the first of the large substance and the first of the first

# WebSockets with Spring Boot

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Withdook to be president to messagging and that North other sectors to privile a happer.

Weinforches is a new way of constitutions, and a supplicing the choice server web terturalogy it allows buy hold angle DCP anchor common between the count and server for also called positive terturalogy, and the effect the server constraint to the web well-unit the client do long polling to repeat, a new change.

This section charms you are earnight where you will send a increase through a fill of end joint (Frichers) and receive the increases (Language) in any a web page and entire heatieript intraction. So, but a get animal. Open a terminal staff section the following community.

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# not apring book websekets
# spring init -double-kets -g-com.gorns.spring -a-apring-book-webseckets --package non-com.gorns.spring -a-apring-book-webseckets --package non-com.gorns.spring-book-webseckets ---
```

Letichite w book at the past, will file, wer Liennig 15-20.

```
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238
```

The spring-base -itselfer -emission is the permutational bring of the depositional activation in the permutation of the permuta

Next, let's see the Producer than ellisonal the monings to the OTAR page. See Long. (0.21)

Liming 16-21. An impaction of commences appropriate for incident Professories.

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Linking 19-21 shows the Printeer . Seek How this will be sending messages to the HYML page, Lee's examine in

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- sendPersageTv. This included way the SixplePersagingTexplace interned to call
  the properties Send method to be unfailed we should be a other edge of the
  converties Send method requires a destination, in the case the reper where the
  manage will be explicated the message shall. You may have unfaced that there is a fiterial path before the tiput's mane. This is the saw Weishockers will admire the topic
  among by adding the stupic perils.

The results in a very strigger Printinger where. This takes will be a small in the BEST emapping, as whereas in I Ametics 10–22:

Linting 44-24. An image by commissioners opting with WebSocket Contribution

```
mackage com.apters.tpring.sem;
import org_springframework.became_factory.domitation.forthwaterH;
import org_springframework.ecm_bund_sectation.Factorization;
import org_springframework.ecm_bind_sectation.Recover(Populage)
import org_springframework.ecm_bind_sectation.Recover(Populage)
import org_springframework.ecm_bind_sectation.Recotantualizer;
import org_springframework.ecm_bind_sectation.Recotantualizer;
import org_springframework.ecm_bind_sectation.Recotantualizer;
import org_springframework.ecm_bind_sectation.Recotantualizer;
import org_springframework.ecm_bind_sectation.Recotantualizer;
import org_springframework.forther;
```

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- Medical Popposition To each (topic), "I. This is a production in the ARSE endpoint.
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  again.

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Export org.springfrinework.suntrat amoutation.Configuration;

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import org.springframework.seth.comfig.annutation.fnomthSprintEnglister;

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- gConfliguration. Treatment theretail will must the class as configuration for the Spring temperature.
- Mixed Selections of the supplication. This approximate will use the supplication for present off the accessors attribute to enable former backet name grap our William her subag a very high-inverses appropriate protects. If you need to continue the endpoint of an appet to contrade the darkholds from the test their posteriors.
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OK-Seet
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$ rux1 localhortimb6d/sens/weslage >d Tensage-Hello Nextd*
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See Figure 19-4 for the results of these community.



Piggers 19-2. Society and Society mesones.

Figure 16-4 shows the exact of protony messages through Richts stars. Some imagine the prombilities for new applications that requires one northernorm ment come (such as construg each time of applicating steels on the Ry for your exercises of applicating your web allowed because an esstars). With applied book and Xendershop some correct.

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# Summary

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#### CHAPTER 11

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# Spring Boot Actuator

This stagmes the species of expring Astronom is making and explains how you can use all its framework in more recording from applications.

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Describbles depend on more thank party on ballingues to the Corp polar and Lim part saying that the school; but this increase that all the honey blood is the five eponents. They constrained recover stage application and the sector accounts a public.

# Spring Boot Actuator

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```

As you can set, the depondencies or set unductivator, and the sull include the spraige book a tarter sets and the spraing-book-starter-activator point. See Lating 11.2.

# Voluments 2018 : 245

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Liming 11: Exhibits the main application. As you can see, those to making new (b) pio a simple web application that there is the solution of the criming "lipting floor. Action 27: It's based on what you already into the other processes when the solution of the solution

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Figure 11-1. Inthele/Tocalearintilliniumtinium

Figure 11.3 shows all the finite fluory so can account through the Account module. The Account green you aft the possible endpoints that you can access. Remember you would be add the Spiring (CODE)/O dependency to programs, set his account.

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Figure 11-2: http://localbarressillinging

### /configprops

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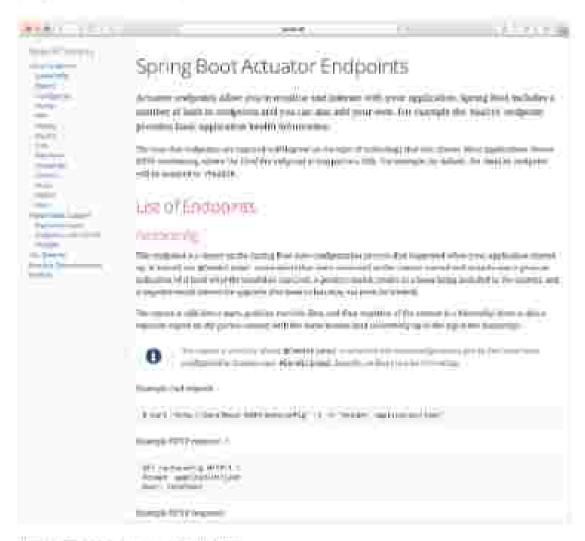


Figure 21-E. http:///freeliver/http://doc-

### **∌dump**

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Figure 15-8. The attention amount of the discontinuous SQL arran-

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Living 11.7 Almer very simple EGI, that self-indian me table and one record."

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Living 11-8 shows recover 2 of the model Lacrage. As you can see, the outsi difference is that Value of new arounds to add. Now, if you can some application as some?

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Plymer 21-14, http://lacablent.mm/dagfile

#### /materies

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Figure 11-E: http://lieu/bintribiblesetrics

Figure 11-12 shows for /meterics surjamen (Lymictale) a limit crimy cory indemning you will be limit that you feet, indeed invoked has the falls. I think this is a rice was to have distribute and mudy-to of your application that work out of the feet. The only thing you need to do a use the CounterService or Congression service antentions.

### /mappings

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Becoming that he adding the security source; pure, you make security by deficial. The source scale because and the process will be prised our partie has a fair princip established because with the princip by using majorance, statebase, so LDAP users; see the forms of the forms of the forms of the princip.

Not now, let's add the endpoints abuildoes, enabled-tent and the spring most starter security promoted come the application. After comming the application, take a look at the logic and case the processor that is promoted out to 0 can be sent a third a character endpoint.

```
Value switchis security processes: 18754112-4609-4690-8000-2178004465011
```

New they upper a interioral your seasons the following extrational:

```
5 rank - 1 - 4 First throp://docalinust.fb0f0/shutflown_ru_numra18754120-e405-4890-5100-
12 f90b lenura
HTTP: 1, 1, 100 OE
berger Annhe Smythe /1.1
X-Carcinol - Type-Options : montry
T-888 - Printment inn 1 | 21 | minter-tracelle
Cathe-Control: wa-codes, ex-sture, how age+0, exit-revalidate
Program survivale !
Linkson : W
T-Frans-Shrittens: DDAY.
SETTER Transport Security: www.less-34100000 ; includeS00000000
R-Airs Licithon-Context: application
Concent-Type: noplication/jumismossat-AIF-8
Francher Empadang: Iftimked
Huts: heal, 47 Firm 2016 08:32158 OH
("westage" "Chutting does, bys ... "
```

As you are see thing this notion, and are using a PCST mericulan account the "Short this moderate, and you are parting the user and the parameted that was principle our looker. The result is the "Short Ing. does, type..." message. And observe your application is transmitted. Again, it's appointed to home that this particular moderate has see until craft mode.

#### /trace

This endpoint shows the same and resistors, which is normally the last less HTTP requests. This endplants can be much lesses all the respect this must deep the representation of the debug prographically or the HTTP / losed, his content power application unit go to be ep; // Incompact of the // Lance, his placeholds we consulting constitute to Papier 11-17.

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```

Digning 11-12, Http://incalleast.HHHD/fring

# Sensitive Endpoints

I are bround that the collections is a smaller madpoint, proximit that September on the province Line will be sectioned by default. Every plain jou wain to accome an endpoint, in well provide you for the statisticans and provinced.

The notewodperms that has not sequence are friend and the alike So, if you want to double the acquetoe frame, you conconfigure those application, properties lie, for example, propped that you already have security and produced to the presipend to the mercuries and proceed to the (been and France marginals). When you and to the middle influencing to prorperties the properties the

```
mapaints.bems.comition-false
mapaints.truce.comition-false
```

Hypersupplies here is response, you can stop IT how such their reason it to see the charges. Try to names the Pierses and Pierses coult (due; you won't in asked for confequals. The key have it to set the supplicate, equipplies suggested suggested suggested suggested.

Accounts the mean that you can deploy or can adecounts. For example, if you are not many secretis, and you are not me embatists, beautiful existing from you will only one to the discussion indicates the majoritaries are not provided by the secretism of the secr

# Changing the Endpoint ID

Trustan configure the emipermit's retind will stronge the more imagine ducyon from the medianal medianal medianal forms for mid-modern the spring forms, excellent from the medianal from medianal forms for medianal forms and stronge in the applicant for preparation the facility for the medianal medianal forms of the medianal medianal forms of the medi

```
emperieds. Seme. interpring.
```

If you make your application (may and resist) to opply the charges), you can also see the Aberes undiport asing the Agricus granipoint cornect.

# Actuator CORS Support

Whiteher Spring Bost Acrossor equitate, you can consigning CORS (Cross-Crogos Resource Guarang), what is address to specify of the specify of the specify of the opposite and appropriate context of property and one of the specify of the specific of the

Tion configure this terms application properties the

```
endprints_cors_allment-arigins**
endprints_cors_allment-arigins.-GET_PUST
```

Dynamapphics from manufacturing store it and reconstr-

Normally in this media is a comparable of the condition o

# Changing the Management Endpoints Path

By defined: the Harring Bose Communication as an encountries the cost, which common that all the Arminion's multiprome can be accorded from the post. A fine emitragic Alexand, Theorem, and so on. Before well continue, was proved application. Forecast change the monogrammy context paids by wilding the following property of the unput that five property law file:

```
management.comtest-paths/mentus
```

If you from ever application, you reflect that the large instantible happing a suspence of the sindyward by adding the /norifice/(endpoint-tames among pack. We can pass access the of one which individual through http://lecalbust.indo/norifice/trans

For each the decide security of many the addiest, or charge the part to the endpoint.

```
management _amtest-path-/manites
management_amounthy.onubled+false
management_pach-Add()
management_add():s+527.0.0.3
```

This configuration will have as a suppose in the contract parts. Associate a seed in the mass, the security will be distributed by a will have not prove becoming — one or the sum application and distributed point management endpoints, and the indepoints or assumptions will be start to the LET. O. B. a address.

If you must be drackle the cody-unit (locker sint) insense), which the following googlesty to the language that the

```
management (pers) + (3)
```

alyon one principal and principal the nangement, port < 1, you wan to subjustice that the nangement of the subjustice that the subjustice that

# Using Spring Boot Actuator in a Non-Web Application

Maybe you are confirming through the more the Spring Book Arramor positile to a non-sort application, and the animo je, you proceed that sold contributes are specially services that the enry specific tooks, such as lightly processing, or contribute some application application to equippe a web contribute.

In the skirtum, you are going to could a simple should have application. It was so take and see how the Spring to finder works in a new seek engineering.

first's start by manufacturing the Schooling community:

```
# skule spring-bunt untwetter
# od spring-boot-actuator
# spring-boot-actuator
# spring brid -d-actuator, remote-shell -p-com.apress.taring -p-spring-boot-actuator
- buckwe-name-com.apress.bring -same-spring-boot-actuator
```

Use you make what is new? The remote-shot!! Supershines make Catasii (http://www.creshine.org/)
and research to feed. Singure going in announce, respects application image into and you will see how be
intersepretable the Actions.

Ler's court by food input the poor sent. See Linning \$1.11

#### Distings EX-TX: prints are:

```
*/inil wmile="1.0" hhcoming="UTF-6"/)
(project welm="http://new.mo.apache.reg/#CM/H.O.O"
exlusive1-"http://new.mo.apache.reg/#CM/H.O.O"
au3:schenaypeation="http://mwem.apache.org/PCM/4.0.0
http://mswem.apache.org/xxd/mayem-4.0.0.esm")
umcde1VersiuHot.U/O(numblisersium)
```

```
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                      emmeraption/Ossu project for Spring Boots/Americanium
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                                             cartifuctibupring-boots starter parants/Artifuctido
                                            evers time(3.3.2.RH13&SEv) vers law).
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                      W/Interest in
                      ARROSCET LINE
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                                            # (nluginus :
                      (/jegisti
Marie Sec. 23
```

Assumed 11. If who we the post, self. The post new part is the spring boot at after deserte-shell shapendowns, blood, our pool application so namel, and there is nothing to the notice your main upp to believing theorem.

#### € Desire applientions:

2 sell - 2000 mershucalitest.

After your execute this command can will see you things. First, the logs principle a processed

Second, this program never reads. That's forcesses the CHASH said as historing for defining at part 2000. Open, a temporal said societies the Selberting continuent.

the the passess of principe you will note the pressonal from the logs around throughts example. Subtilified as a part of the passes of p

```
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by one of their common with the disconnected switch:
           DESCRIPTION.
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           Display beans in ApplicationContext
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           manages the atom plouds
dambered a matering daublesed
          search file(s) for lines that swith a pattern
PERMIT
Distribution A.
          Depute actuator amorgants
           display the term one.
Bbw.
filter
           a filter for a stream of ran-
3444
          VARIABLE SHEE LANGUAGE CHEMICAL
tion.
          have management fortunations
Jul.
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          704 Internations
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configuration Properties Ampertinguist
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New that you now what sudpoor you and profes and profession for the health imposing

```
# majoring inverse healthforpoint
{status-if, diskipace-fatatus-if, farals/30000017000, fare-20512227320, threshold-100057001)
```

As not were not you can experiment with all the other configurate. As you can sen, you have the most behavior as a well introduce. Hyper was a solid your sens security or a being the default poor (2004), you i as do so by adulant all the properties of your applicant interproperties file, for example:

```
shell.com.mabled: true
shell.com.post: 2222
shell.asth: simple;
shell.asth:sample.com.postens: postens:
```

thy one remain pour appallianting, you many cast in manner with the didlessing

```
Karin op zazzonerithulalnint
```

Use parament as the parament, I commed only basic parameters for the shell, the you can get more automation about enter properties that you can upply by wroning hit parameters, spring library in a large most in many contract for forests (but I commit - apply in a time property are library.

New you have a good and remaining of how the Speng Book Admiritor mediale scorts, (activing what ) is indigenous are and how to me them. Of course, you can correspond each medial brodet amount but I will some him be a lateral legion.

# Summary

The chapme showed you how the Spring Boor Administration, and liding what in authority and how confirming life or the With the Administration, several investors your Spring Root application, from using the American to original the American grounds delonguism.

The new chapter talks about doploining your lighting floor applications, including how to create IAR and WAR files and use them as a service.

#### CHAPTER 12



# Deploying Spring Boot

During the entire besit perchase being manaring the Shreen command up ting-book true and Chieve I covered is at two much detail, but allow you execute in you are at multi-executing the Spring best Morea. plugat petch. These moreally been a perfectler flow. They will conside your application (classes), ever use the mill man, and con your application taking the target // Lances. [school the compilations place conjunctal) the mangriped places into (directory as the southing three boys.

This obspace discretizes, and their blusses constrained that will associate to become standard the applications or executable parts. If you produce you can among builts their your across application and can there many an executable parts around the constraint and can the constraint and application and can the constraint and constraints.

Before group store the details and med to see up the energingers, which will be given analyzation the Applies Best Replayment between

# Setting Up the Spring Boot Journal App

You have been emilion with the application formational the name back, and you are going major break of a form Chapter (). Let's get stateed.

itises use the tolker pay confermable percention between

```
b mbnit spring-book-journal
t re spring-book-journal
t re spring book-journal
t spring-book-journal
t spring-book-journal
```

As some allower, you are indifingly time of the dependencies (that you already home). The majors (the ) security powers.

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```

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                                    cart if act broughing-boot -movem planting in Dart I foot bit-
                          a collector.
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e/himiled to
```

Litting 12-1 shows the pure, and that princers group to our. However, to decid the personal modes that you are adding although dependencies from pureous chappers. You can enge some of the files from Chapper's characters purious the spacing book - promote secure gargers), because the applications will be secure. Even on I didn't express that you can use 551, and connect missingly like 25. New is a perfect time as counters, so when you display at MSI, will be missingly.

Take a look of the final discretivy describe of document within promisings, whose in Figure 12: 1.

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```

Pigney 12-1. Joint 2014 and access a money

Mr. or resident balls, 28, P\$ ban.

Figure 12: Unlesses the directory straintage of the posteral hypp, had which classes will be the same as the most in Chapter W. Table 12: I downshis the packages and includes under poster. I about security repeat all the souls into posterior posterior the souls into posterior posterior.

Trable 12-1: Reventile Co-in Strategical

Package/Directory	Class/File	Notes
TOP-HERRY LINES IN	Sergephen Leann Dept. Leann	Perchanges
con approve their demain	Swamalistry	Not drivinger
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matheautracid Ma	Nome Contacting	Decilionger
con.uprom.upring.config	IntermrySecurityConfig SecurityConfig	There is a change at both classes
sar/male/answers	emilianthe properties	Clarge and want being proportion.
rat/web/tensistres/	beystern, jin	The property life that periods a generate
ros/main/resimines/ithis in/main/resimines/template	Crist" Index,html Engin.html	No changes

III Note: You can find the basis's source code on the Apress pile, Or you can up to my Giffour account of https://github.com/friiping44/pas-spring-heat tright the littles code.

Let rates by ellectring not of the flies married be modulint and the new beyons respectively.

The property is the SSL family 12-2 and 12-1 alone 2-2 months of the free first tytool fig. we perform.

Listing 12-2, are many june come apress apring config Toolinmory Science Config pass

```
index or sures frame from the factory during the factory;
light org spring(research boxs factory during the factory;
light org spring(research context annutation.Configuration;
light org spring(research boxs arty configuration, anthorized boxs boxs are
motherized to Managerful More;
framet org spring(research box annutation;
framet org spring(research box annutation)
framet org spring(research box annuta
```

Licing CL3 down the Intercritical referring above, which is very similar to Chapter 2, but now you are changing the representational general multicontrol the them are group to be attricency. Of an one pair one change this to prome as a threshow. (You can do this as an exercise.)

```
Hallog 12-3, recommendation contributes appropriate from high engine Canta page.
presume and aprecia apparagrammes
impure may suring from mark, context, amortanian, Confliguration,
Connect ong approaghamework isocurate, config amounted for set builders (AttoGeociaty)
input sig springframework_security.config.accutation.wit.configuration
Webboconist Configure codulities :
import sugrapringfineswork.seb.servlet.config.monthios.ViewCentinTletPegistry;
terment die verrite frammitt auf vervier, sowie, monte, monte bei beime fantigues Master.
(Confining time
public class SecurityConfig extends WebSecurityConfiguresAdaptect
                 #Owner Lde
                 professional metal configure (AttaSecurity http://times.inconfigure/
                         http://erthuribetemicsta()
                          an (that cheen ("/**"); an then the utind()
                          James 3
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                         pargint 1
                          . Lamout Dapenwit All [5]
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                          DOMESTIC TO STREET
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                 stunic protected class EngisContenlles estands WeltherConfigurerAdunis()
                          (Overthile
                         public wild anniviesControllers(ViewControllerSeguitry registry) to
                                  registry, additationismilar [ ligin ] .covirator [ ligin ] ;
                         1011
                Ш
h
```

Living 12-5 shows the Socurety-Carfig. Inva., which is entire pure of the HETP-security. As pure consection destil, you are sectoring everything note and providing a logic page and a way in logicus. The are also adding a Logic Carta viller class that configures pure the controller [breat spring security viligin) and soting on one (templates (logic break). Also notice that you are doubting the CDES (Cross Desgin living Magnest) by jump the carfif ), standard [. You already before about Spring Descripty and the entire condiguences, see ( 1900) ways of the doubt and consump with the other files.

Next, brik see the application, properties, shown is futing 12-1.

TUMING 12-4: https://picorealinores/applications.gov/person

```
spring.drimeurr.orl - jobi reyspli//lacaBoot:3304/5mrsal.
apring dutum mant, normant + springhout
rendered type - flatour entry a community specially
specing datas were tectabile bile - true
apring shraneurs, collisistinguary - Milet t.
againg two showing - time
section to a Ribermate, diff-letter + titeate-drop-
spring job hitemate.naming-strategy - org.hitemate.cfg.lannoccitaring/drafegs
spring jun properties hillermate dialect + org. Billermate dialect. PySQL Chalect
section data, west basiched and
management sentent path-innocted
on the contract the state of th
corner sectables
perver sul kny-store-classpath; haystone. jks
server.ssl.key-state-passwordstancut
server.sal.kny-passeord-toncat
```

Litting II. I shows the new applicantion, properties. As you ran over, a common of the information from persons abused, including the administration and persons in the enabling of the abundance and persons. It also no bases the new sever properties with a different containing and personal. As you can see, it was the nexteen, and, optoperties a remainle a sex one worked layer by providing the keystone, the keystone of the keystone. About notice that the newest part is \$441, we now you self common or the https://incalheat.1443 little.

### Creating the SSL Self-Signed Keystore

To setter to per the 581 teething as your application, you unid to critice a side opposed beyonce the depose about process CA (Cartifician Authority), got carrier appoint it as your beyoner file.

This example assumes that you will do the will conside to key their, so offers a terminal window has to your presents book and see one the following community.

```
A Approxit general value toward Acquig ESA Acquires announced Control (Approxitate parameter toward Re-enter new parameter toward toward toward and sent name)
[Unionself: aproxitations and is the name of your negotiantional vest)
[Unionself: publishing
What is the name of your negotiantional (Approximation)
[Unionself: aproxitations
[Unionself: aproxitations]
[Unionself: aproxitations]
[Unionself: aproxitations]
[Unionself: aproxitations]
```

```
What is the name of your State or Province?

[Unknown]: By

What is the two letter country code for this unit?

[Unknown]) sas

[X.CM-aprove rectio, Dispublishing, B-aprove, s-my, STang, C-co correct?

[Me]: you

Later key provious for closurate

[RETURN if same or beyonder parameter):
```

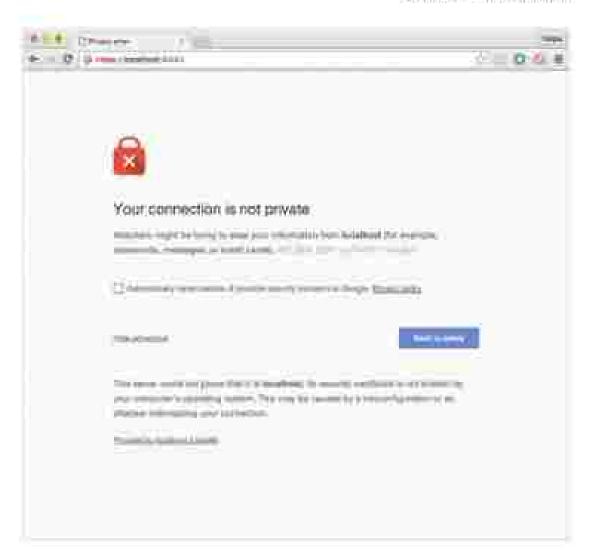
The keybool improved comes with your force distribution, or you should not have any some. This commond treates a keystage, just and places it is not begin forced on the force of the your common name, organizational unit, and so on, but keep or mind this you need to consented the parameter because they are needed to the application, properties the file. In this cannot be parameter the keep of the law the parameter for the keep of the law to the parameter for the keep of the law as the parameter for the keep of the law as the parameter.

# Testing SSL

All the other files sometiment the state, so it's time to east the new 550, part. Remember that you need to have your MySQL server aparent remains. Then, you can renegate septiment on a securit.

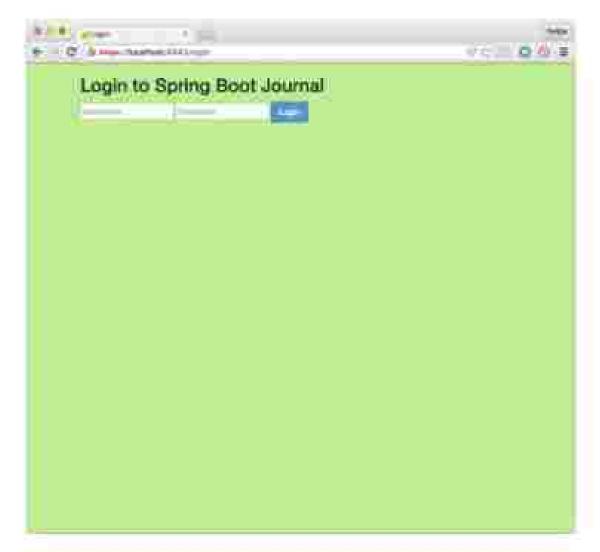
#### \$ 1/minus spring bont run

After you execute this encounted, you should have to your logs into position about the Towns through as post \$443. You rate providing to \$7 Invallant (304) blanc into should be the first time you'de that you'defined one amounting contact (dejecting on your browns) to Upon 12-2.



Algebra 12-2. Googli: (Zimmur) marken of Artificial/ZimatheritidAN)

Figure 13-2 shows the result of going to meletras (7/2) and click because the point their is a continue of an extension for a continue of the point of the point



Olganie 12-8. Addy at // Limit Post: M43/ Coulin

Figure 11-3 states the Figure and some includes became ones the underpage a context (a) was accused in the large 23-3), to you ment to provide the interminer and plantaged. You can use the work you set up to pressure the example: up tog as discriminal and boot as pressured. They providing the conductable, you should be reduced to the under page 5 or Function.



Planter 12-4. https://limilinet.bl42 after the /limit pour

Figure 13-4 stones the inter-page atterpera infimit soon rectenities. Now perchange a personal supplication. Maybe note are whethering vites (status said the example in the exceptly chapter Well, right now a makes perfect source to add 0 because you are giving to start deploying your application and minimize the example of unit a stronger, and what you are inviting for a in large near approximate.

# Creating Executable JARs

New theory or have your yourseliants seem and ready, let's counter amountainer applicanter. The assessment will be portained and your countries. Voiceau think unless a dealerst opposite the property of the property of the property and the distributed in different some.

### The Inva Way

Which you species a large applications and you must be care it, becomely you need to know about the class that a has the public of the long and made meeting to get one used. Var would do so meeting like the

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```

Normally you specify the throught with the rap option to prepair depositences (if medical or alougosting soon application as a IAR life, arm more provide a MARTEST, We where you need to declare the Marte-Claim itselformion. (If his declaration and mose which within worthin the fold tile is your applications make pour a your applications in the your Avoid to make the fold tile is your applications.)

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1 java -15 . Limbinsporty bat -ise symmetre
```

2000 man maid this (() market introducts) () (cry/ b) (market () (crom/s)(ed.).

### The Spring Boot Way

Spring flow works the same way as first that simples (where you evalue as course an executable application from the public attention world main medical and it will processe exercising that you must be considered as a second processe of the public and the public

In commendate secondations and executable present eyes, execute the following communicity

Eliginary packages (

The command will came a target appring fact - journal (6.6.1-984PSFOT, jostile and desser That's non-securable apprication, an executable SAS. Now you can our quality the following:

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1. Tayor - that that jest contribute things - thin single - things - the personal limit of the personal limit is a second of the personal limit is a second of the personal limit in the personal limit is a second of the personal limit in the personal limit is a second of the personal limit in the personal limit is a second of the personal limit in the personal limit is a second of the personal limit in the personal limit is a second of the personal limit in the personal limit is a second of the personal limit in the personal limit is a second of the personal limit in the personal limit is a second of the personal limit in the personal limit is a second of the personal limit in the personal limit is a second of the personal limit in the personal limit is a second of the personal limit in the personal limit is a second of the personal limit is
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Tone principle connected start. Their recession flow yet can align your application to just them so they can of every scholars by their party therems, Wire, what? Represented that the joseon application make interpretation (a), you to this common at them is an expension above.

Where you can the Marris package good, it is ill package all the dependences outling the same LAN for made will be a VR 1 and will remark the PARTERST OF the state has all the polarization related to your app. It will also contain the Mate - Claim and the Schart - Claim sections on a set with the many of the state of the state.

The content of the about the product of the text file generated with the following:

```
$ par for target/suring/mirt-journal-0.0.5-SMAPSHOT.par.
```

(The Sar command is another wold flar comes with the (DM angullation).) This command prints out the (All structure but carries that there is a Lib? folder where all the dependencies are updowned by my Book classes flat to helpers to run your application. From some to see the MALEEST, AF the, you can extract and other it raining the following commands:

```
2 pat wof torget/spring-boot-fournal-5.6.1 SAMPSAUT in MCTA-INF/MAKITIST:86
5 cat MCTA-INF/MAKITES.WC
Nanifmat-Warning: 1.W
Implementation-Fitle: spring-boot-joronal
Implementation-Fitle: spring-boot-joronal
Implementation-Fitle: Spring-boot-joronal
```

```
Archiver-Version: Pleans Archiver
Harly-Ny: felice;
Start-Class: cox.bprnss.spring.SpringBootSquinnlApplication
Squinematatim-Vendos: ld: com.apreis.spring
Spring Boot-Verrior: 1.3.2.RILLALE
Cranted By: Apoche Maren 3.2.4
Harle-Na: 1.0.0 6H
Seplementation-Vendos: Piertal Software, Inc.
Rate-Class: org.apringTransport.boot.Tander.Acclassions
```

As some six we from the MATTEST, NO like, the other of laws the furnishing become by the foreign.

Boot Reveral type Livet Law show and the Math. Class don become points as the one helper land weeken become spring boot share all be to charge of bootstrapping year application.

New your bland form to control Spring Burst standarding consumable 100.

Refer 1 know that asmedimes you don't won't to not the best when you are creating the executable JAP.
You get execute 1. Japane markings - Och laffest setting to with the body.

# Creating Executable and Deployable WARs

2000 mess have to extraje and converted to manufalme (All appellations from the stay to distribute your application). For a last happens when your shareh have application extracts like Phoesis in Server. Torontal theory, or Unit Spirms, and aim used as deploying sides.

With Versing Brown appearance made many. You never no change more france:

- Modeln powers in Line but Date grant Date.
  - Change the queckagings rag from just resear languages the playm sat of true are unnegligable?
  - Add the spring Dout-starior-langual dependence is pour pur, and and see the range (opensized to a pour further grantle set) the name is the configuration) continues a president formula description (Confe).

New Circular LL-5-liter that prime and proof to bound LL-6 for Greatly personal.

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Listing 12-5. Enapper of promount
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swins : xxi="attp://www.ap.args/POW/A.c.o.o"
swins : xxi="attp://www.ap.args/POW/A.c.o.o"
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The self-make give any license manufalls as expellent entering any and intrinses routy. There is a second who is a WAR the tensor difference are placed to the WIE-18F-11m provided directors— in months of the everything that you still be the ME-18F-21m will be taken by the application commisses, so if you have the Truncat [ASI in this directory [AII-18F-21m], the application commisses will had because of displacing [AsIa Truncat [ASI in this directory [AII-18F-21m] the application commisses will had because of displacing [AsIa Truncat [ASI in this provided to the provided to the place of a contribution of a contribution.

Next, let's see the butlef, gradle through in Limna 17 ft.

Listing 12-0 therein to the grades of your use using Grades to bright and compose Apring North pipel.

This models the main application to sensual front the Spring Boot Service, but the list that it are absolute time. This is required by a new the spring such is ming the Service Lift support and it's recommeny to boot our represent applications where it's being deployed by the consumer.

Let's see the final evenion of the main app. See binding 25.7

Litting 12.7 Above the problem of the control of the problem of the problem of the problem of the control of th

5-α (effect the θ(f) and the government and the magning type (see made to choose your continues (end)) and the following command:

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```

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```

After executing this command, you can go to bette Affectables to \$440. You will be reduced to the filegin page. Those some condensation transfered in men the home page.

Excellent time have now a distributable and executable WAR related app. Seed, let a deplex the same Walter a Torona Union Conductor. Note — As a recommendation, you can abways example a WWN for any extend from the Spring@ootSecvies.initializer and override the cantigure method as you men application. This way, you can create interesting and contained feasily Spring Bootspools.

If you want to create a WAR when you are starting a new project with spacing, liest, you can amount the following convenient (your pound) apply:

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I spring built "deads, them leaf, data-lea, data-rest, actuator, security, actuator-ducs grant agrees, spring - security actuator than 1 - package manuscancians apring manuscapring - package manuscancians apring manuscapring - package manuscancians apring - package manuscancians - package - package manuscancians - package - pack
```

The only difference is that you added the — packaging—are notion, which will configure everything that you middly your particular operacy log will be out to early. Each the Springhoot Stry Let Distinghour configuration will be consider as concents close the

### Deploying to a Tomcat-Based Server

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& Brew against 85 brow the tall Towart

I jurisdicity recommend the Privent or were; a former server or records' tour on that of the substraction of https://wet.archive.com/server.archiv

- You may mostly pring insight, as embedded built by parametrize and inding your ferring exponentions.
- in analysis assert to the man south on Contribute (in Administry Main Cont.) and Books
  (Key Value Force Dominion) for session management. These too very Sanity when
  you have a (force) of account and senior to compute the session management.
- The fifty configuration and very every terminal.
- Therefore decommons and total at http://teservet.accv.givetal.im/decor index.html

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I tres aprice Ah hors top povetal/top Ah hors lastall biserver

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  - \$ . Atcount few southerness of contains a manager of \$10.30.2.86.255

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B of material
b of selections
5 op "/pro-spring-boot/ubil/spring-boot-
journal-b.S.1-ShnPSPCT.war ./journal.war. Renumber that you need to have
your PMSCL server up and commune.
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Siest up in the less dimensity and pour there server.

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3 of his:
5 /teruntum att.th start
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After resenting these community, their server dought ourt. New you can see the logo-

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# tieff -# .../lagi/tietefine.out
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Become from the promonest for your apple ones / factors! Become you are name an apple of the constant for the part terms all the other employed, the / jureaul/watter and / jureaul/apl.

Congrish data out You deployed your WAR printed apply an appoint on employ Well door

### Activating Profiles

However, not post the difference between soming the period App or singulation appear on the Konstant When running the journal App or singulations, you are using the letter of Joc allight 1849 (DRL, which is a SSL connection. But belong not set using the write journal the worker with advants when you are deploying to a container and a run come of the periodical that are with only solved running it a markither brack. This remains that they want to secure the Young at hereof, you need to the mark that are with the way of the periodical transfer in the periodical solved to the first and the periodical transfer in the periodical transfer and the periodical solved to the first periodical and the periodical solved to the first periodical transfer at the periodical solutions.

Also, which happens if you want to a more it so a deligned datables, such as a production that have been a few some office of an improvement of the source of the fourth of the source o

The point fluing is that your express the Spring problem conscious true process of about to murbic chapmas. Our of the recommended ways is of hosp several applications countiles are appearties him as you can write them in secondalism mode to or the comment.

You can create, in example, a new applicant speciment along properties for the Monthle absumed in the other Maybe you said news a new database and our that new as no reasonable for consists and shown in farming the R.

DMOQ 12.4, recommensement application-protein merger properties

#### spring.dataumerem.wrl + jdbc:mysgl://lacalhost:3304/calamdur

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spring.jpu_whow_ral = time
spring.jpu_whow_ral = time
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#### sgring, data rost, basePoth=frest

#### management.cootout-pathwianaight

enquisints shot men, enabled-tree

Liming (2.8 shows the cost applications cost nines, properties the The mole forages are the corner of the database from justing to callestar Deposition from and to consider the calcular database is the MyNOs server), and the justice for the cost from Zept to first and the management contest picts, from Jean Living John The SSC proposition or the proposed.

Frenches purchase the appliand run it or annualishing, is that may the purfile to contracted

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1 -/mmv clem puckage -lisktpliestx-trae
```

```
$ year-Depring profiles, active-"containes" - year torget/spring boot-yournal-0.0.1-SERRORT.max
```

In the large returns now the the first three horses the legerals. The stallness of proof first are settings contained. Note that also in the stallness of the endpoints and been in your Mission (one ((the Journa) dip content the setting labels.)

III **Note** If you want to not it hind, including with the spoling-boot cash, you can do so by executing a resence appring-post case. Obsering promitiles, exting-"contagnee" to octivate the container profits.

Now the queening as how as a year action container in the chartest funed commune (fits as sample as adding the projects spring, portifer, action-container in the chartest firstallations/conficutalisms, properties file.

SI you are many tile in accord, you can go not the same purish the hill-wave community are based on a bitar mendlation if

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1 id /unc/legileCellar/typerwist/werryints/liberer/
```

<sup>\$</sup> od synteries falon f

Stache apring.pmfiles.active-container to cutaling.properties

This command will append the amportune in the catalline, peopert ion file (see the double 20). Next, we can expression in exercised see the ampoint less that be file to file amounted.

Note: Removement that to present a container-messy WVR executable, you need to monthly goar parameter and substinue from the SpringPootSeprobet Service. This is carry for containers that support the Service API 2.0+ variable. For older variable or laguely containers, you assign more into as the Spring Sout reference documentations.

# Creating Spring Boot Apps as a Service

Another amorting frames of tipring blood is that you can run your approve a service. Hanning a Spring blood as a service blood to be service as the service

If you are strong than, the easy sharing violatered at the standard configuration declaration to the Spring Brook plugger or the power at the analysis best left, grantle from Larrange 12. 9 and 12. 19

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Disting 12-96 percentil
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"Trail war to -"1.0" (macanting -"UTF-4"7)
minutert only-"http://www.appha.org/PDPUN.0.0"
swing: sri-"tttp://www.sp.ngg/2001/0015gtmms-ingtmoce"
                                         as Emphasistant transfer by the Province of the Control of the Con
                                         http://maves.apuchs.org/sed/savns-4.0.0.sad*e
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Linguage CAP shares the pire, and fair. The imply throughtful a new jears the explination may be explicated the same fair.

Laying 12: 46 shows the builts, gradle. The anily thing sum need to will by the springhest declaration how, when you package your application with the infliming:

1 ./mmu.class pachage deligitests-tras-

You can execute the (All districts):

1. farget/spring-bolt-journal-60001/5M695M01.com

And a roll true So. of powers command a USES, enumerator year con past band it to the Febt / init .4 part Orbital environment, enumeraty year between executable poster / apt inditer).

1 in a Zept Spring-boot journal-0.0.1 SMAPSHOF. and Zetz Enit in Journal

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S. frand =0 340 target/spring/host-journal/010:5/59079KN.auc
distribute
```

Note with sem (that the first 2.82 kines of firm (the earl a 16563) scrept; Set, that a har-straine.

## Spring Boot Apps as Windows Service

Wyon are lineing to do this in a Wandows surpression, you can take a look at this URL as https://githus.com/ataines11-paratition/ageing-boot-dames, which contains all the inflation to a you must be seen a figure from a gradianton peak some in a wandows stryle.

# Spring Boot with Docker

Lathe process, the see has become one of the operation without the interpretable and provided the of population, because you can have smilliple annihilated that can make the form the same two. This is very structures a sequinary operational and some some that the forgraph of a VII. If you are not into the will not sufficiently the forgraph of a VII. If you are not into the will not the will are the context of the VII. If you are not into the will not the will are some of the context of the contex

Otake one positions the Greeker signaturing. Third you book the gauge that will common the ground apply been mar purifies again and add a new dependence in the gain, set like New Laring 12.11.

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- WOLDED. Neighbot to consist a violation. Inscrine Surging thest consists Working Muschingue to Disease by default.
- NOD: Cripass the WAR(100 DAR) like as faintend, said (or (a)) preference of the expression.
- 189: Needed is said the enrimmentation regarded that will account the Decision profile.
- DPOSE to expense the part EAS incommon units in the part michigan NEL.
- Harry region. This declaration determines how the commuter will exercise scheme
  starts up. To enduce the Transactioning to "Aden", currently as a neutral of enduce.

Next, variable the hillowing commission to build the stocker tringer

#### & moker build -t uptingnost journal

This command will built in itnig with the carrings of / Junior Linguisme. After it finishes building.

you can supply with this command:

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tal 148 06 100
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Living 13. (A shows the pow, will and the new declarations, the Docker plagm and the Docker property proper The Important part of the Docker plagm is the sag odocker/interituryly, where the Dockerfile will be Next, let's see the Dockerfile in Living 13-14. Transg 12-14, secondocumentaria de accionale:

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Note A quick note: In the Docker example you have the Docker the History on an in the containing matter in the systematic recovery docker directory. The only difference is the ADC medianation, The systematic recovery recovery

# Summary

This etupous explicated how as display your floring Bobs appells, as integrate concession from executing estimately with content of the second floring and flow to deploy we booker conditions.

As a displayer, you have a lost of approximation for deployments.

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#### CHAPTER 13



# Spring Boot in the Cloud

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The mass "Chand-Majors" and process is briganing to amongs; because allows you as denoting a follow some parameter that well provide agreed, valuey must not defeting softly must, by the chapters a soft show you have provide a considerably Applies and applications are the Living to delicating account of these parameters.

### The Cloud and Cloud-Native Architectures

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One of the few purcees of the Canal Computing was Against, which started using vertical account primary tool in cases reconcentration, the navious that any deployed application can have protect company power, by prescriping the supplier of artifact bears, namers, processes, ent, without any II, pursue interfered. All three now ways to each air applies from was the result artifacting all the new channel that has been and being process.

The NetPlacement will these our security and we are taking about millions of some stady was are amounting results assumed All these companies have some for it contrastructure required for the Chardens. for their thank that, any application that some as be parent for a load another) on some type adoptable in this new authorized About foreign with the contrastructure is that, you need to start thanking on these scaling assumes will request the applications be that, you need to start thanking on these scaling assumes will request the applications will committee to the black of some applications will contribute as a foreign posyment or between each other to they like it is not entirely applications. When of the systems is also made in the more contributed to the Chical Chi

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# Volum Gorantza 2018 -

# Twelve-Factor Applications

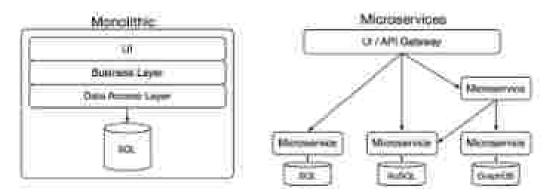
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### Microservices

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### Preparing the Spring Boot Journal App as Microservice

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Figure 13-2 shows you the directory structure, you can be that there is no configure courty anymore, because the security analyzation is no longer negative, does notice that there is the proportion like one is the definit, the one that you should next this will have the 142 at the many described. And the other property like has the clinic world, containing that you are prompt to one is to deputying using the cloud profile.

• Note: The care find the example of the chapter in the Book's natural code from the Aprella Site of you don't duration of the property in the Book.

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#### Dating (3-1; and production on application properties

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# Cloud Foundry

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### Cloud Foundry

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### Pivotal Cloud Foundry Features

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### Cloud Foundry CL1 - Command Line Interface

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# Development Environment - PCFDev

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#### Installing PCFDev

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### Login into PCFDev

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### Deploying to PCFDev

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### Cloud Profile

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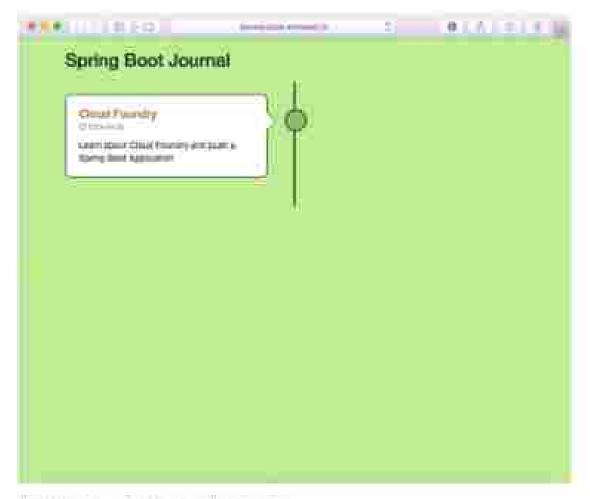
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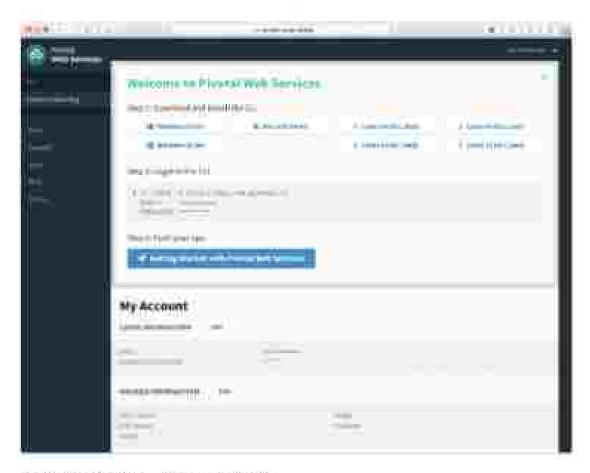


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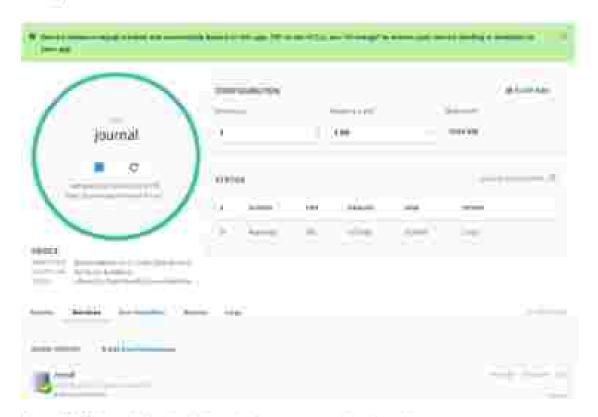
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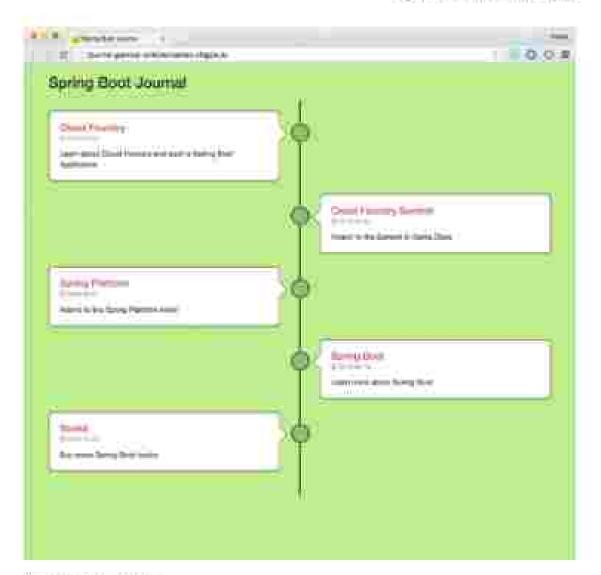


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# Summary

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### CHAPTER 14



# Extending Spring Boot Apps

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# **Custom Spring Boot Module**

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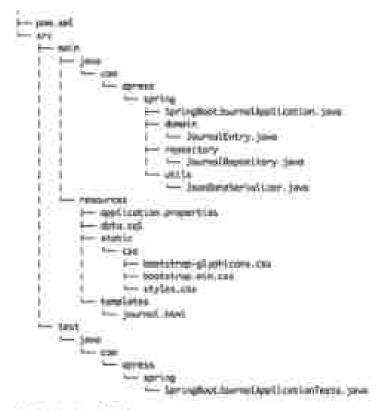
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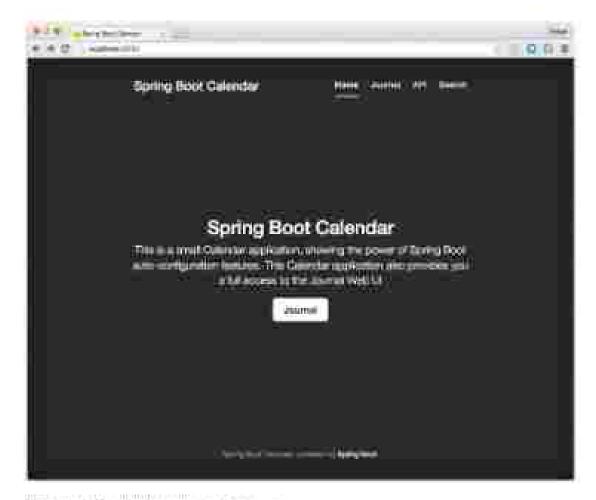
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### **Custom Health Indicator**

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Listing 14-13 allows a simple class that entopils from except Lim and overrides the consequence with a Airway parameter, that is nothing new that you don't already have. Sent is the new proporting of the extension the summer New Listing 14-14.

Linking 14-14, an image in a configured spring Smaller Quinalinabilities care pro-

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Figure 14-3. http://lexil.out.stook/figsittem.th-oughle.com/weith/outline/1000/

Figure 11.3 shows the result of the whole facility DOWN, because your quite autinomium an exception. Congruent beauty from a material years many queries because of

• Note: Another attendable is to use the STS IDE and expect the projects—in this case the playthal marker little one that contains the modules; and the extender—on you can sectionar and use the code conglistion that the IDE offers you. Assigns don't need to pockage and materials project every firm you are a mornination; just make the othergo and the IDE will take does of the rest.

### Summary

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Request and proceedings over

#### APPENDIX



# Spring Boot 1.4.x

### Spring Boot 1.4.X Release Notes

Upgrading from Spring Boot 1.3

#### Executable Jar Layout

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#### Deprecations from Spring Boot 1.3

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#### DataSource Binding

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# Milye Gouerra 2018 -

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#### Analysis of Startup Fallures

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